Boise National Forest

FIRE MANAGEMENT PLAN

2014

Reviewed and Updated by Date

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BACKGROUND

Interagency Federal fire policy requires that every area with burnable vegetation must have a fire Management Plan (FMP). This FMP provides information about the fire management planning process for the Boise National Forest and compiles guidance from existing sources such as but not limited to, the Boise National Forest Land and Resource Plan (LRMP), national policy, and national and regional directives.

The potential consequences to firefighter and public safety and welfare, natural and cultural resources, and values to be protected help determine the management response for a fire. Firefighter and public safety are the first consideration and are always the priority during every response.

The following chapters discuss broad forest and specific Fire Management Unit (FMU) characteristics and guidance.

Chapter 1 introduces the area covered by the FMP, includes a map of the Boise National Forest, addresses the agencies involved, and states why the Forest is developing the FMP.

Chapter 2 establishes the link between higher-level planning documents, legislation, and policies and the actions described in FMP.

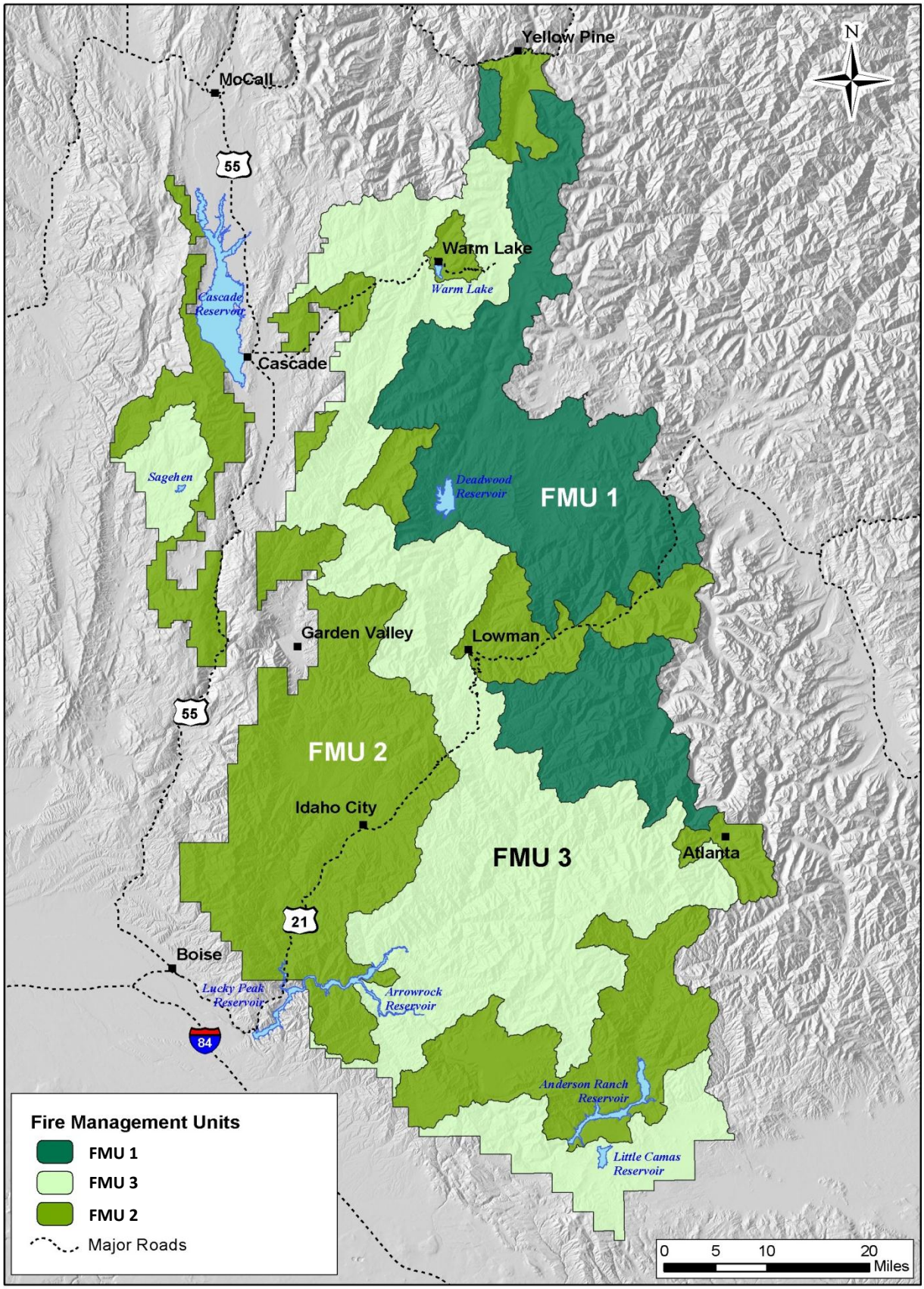
Chapter 3 articulates specific goals, objectives, standards, guidelines, and/or desired future condition(s), as established by the Forest's LRMP, which apply to all the Forest's FMU's and those that are unique to individual FMU's.

Chapter 1. INTRODUCTION

The Boise National Forest developed this FMP as a decision support tool to help fire personnel and decision makers determine the management response to an unplanned ignition. FMPs do not make decisions. Instead, they step-down information, organized by the FMUs, to describe conditions at a finer scale than is possible to discern at the Forest level. These descriptions provide detail about identifiable areas on the ground. FMPs are not static documents. They will evolve and be revised as conditions change on the ground and as modifications are made to the unit's LRMP.

Fire Management Units are linked to management direction for management areas and portions of management areas within the 2010 LRMP. LRMP direction includes allowing fire to play its natural role on the landscape to protecting some areas from unwanted wildland fire, for example in the wildland-urban interface. LRMP areas with similar fire management emphasis and constraints are grouped together to create FMUs. The primary focus and strategies for managing fire differs between the three FMUs (Figure 1). The focus in FMU 1 allows fire to be used as a resource management tool for achieving ecological benefits while suppressing fires when necessary according to values at risk. FMU 2 contains the concentrations of wildland-urban interface found on the Forest where the focus is on protection of property and the associated landscape. FMU 3 is characterized by general forest values where fire management is commensurate with values at risk.

Figure 1--Boise National Forest Fire Management Units (FMUs)



Chapter 2. Policy, Land Management Planning, and Partnerships

This FMP is a detailed program of action to carry out fire management policies and achieve resource management and fire protection objectives defined in the 2003 LRMP amended in 2010. The FMP is updated annually to include changes in LRMP direction as well as issues stated within the Federal Wildland Fire Policy, the National Fire Plan (NFP), Forest Service Manuals (FSM), and Forest Service Handbooks (FSH).

The regulations and policy in the following documents guide fire management as outlined in this FMP.

2.1 National and Regional Fire Management Policy

Forest Service policy and direction that are relevant to this plan include:

- Guidance for Implementation of Federal Wildland Fire Management Policy (February 2009)
- 1995 Federal Wildland Fire Management Policy and Program Review (January 2001)
- National Fire Plan
- Forest Service Manual 5100
- Forest Service Handbook 5109
- Wildland and Prescribed Fire Management Policy and Implementation Procedures Reference Guide
- Managing Impacts of Wildfires on Communities and the Environment, and Protecting People and Sustaining Resources in Fire Adapted Ecosystems – A Cohesive Strategy
- A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan (December 2006).

2.2 Boise Land and Resource Management Plan

- Boise National Forest Land and Resource Management Plan and Record of Decision was signed July 2003 and amended in December 2010. The 2003 LRMP and amended sections were consolidated into a single document hereafter referred to as the 2010 LRMP.
- The FMP does not make decisions but provides the operational parameters a fire manager needs to implement the 2010 LRMP. The Boise NF 2010 LRMP is tiered to two environmental impact statements (2003 LRMP FEIS and 2010 LRMP amendment FEIS) that comply with the National Environmental Policy Act (NEPA).
- The fire management objectives in the 2010 LRMP were developed to reduce the risk of uncharacteristic wildfires while recognizing that fire, alone or in combination with other tools, is appropriate and desirable in many areas of the Forest. The 2010 LRMP acknowledges that there are areas or conditions on the Forest where fire effects are undesirable or should be limited to meet social, economic, or biophysical resource concerns. There are some areas where hazardous conditions may be maintained to meet social or economic needs.

- NOTE: The Boise 2010 LRMP refers to Wildland Fire Use, Wildland Fire and other terms that are no longer part of the Federal Fire Policy. Refer to the *Guidance for Implementation of Federal Wildland Fire Management Policy (February 2009)* for current information.

2.3 Partnerships

Boise National Forest comprises approximately 2.3 million acres, mostly contiguous in nature in south-western Idaho across four counties: Valley, Boise, Gem and Elmore. Forest fire management is organized by the five Ranger Districts, each with a Fire Management Officer (FMO) and assistants who work directly for the district rangers. The Boise National Forest 2010 LRMP, which this FMP implements, was developed through public scoping, collaboration, and revisions based upon feedback from a variety of interested parties and individuals including resource specialists on the Forest.

Our planning in many areas within this FMP is intertwined with our agency partners, the Payette and Sawtooth National Forests; and interagency partners including the Boise District, Bureau of Land Management (BLM), Idaho Department of Lands (IDL), Southern Idaho Timber Protection Association (SITPA), in addition to city and rural fire departments (Figure 2). The above partners participate in a Cooperative Fire Protective Agreement (R427-CA-96-011) that provides the basis for managing wildland fire activities on adjoining agency and non-agency lands.

In addition to collaborative efforts with agency partners, there has been ongoing collaboration and integration with local government entities. This is best represented by efforts associated with development of the County Wildfire Protection Plans (CWPPs). Reference to this effort will be found throughout the document.

Figure 2—Boise National Forest Protection Areas

Chapter 3. Fire Management Unit Descriptions

The primary purpose for developing FMUs in fire management planning is to assist in organizing information in complex landscapes. FMUs divide the landscape into smaller geographic areas to easily describe safety considerations, physical, biological, social characteristics and to frame associated planning guidance based on these characteristics.

The following information, including the description of fuel conditions, weather and burning patterns, and other information are in reference to the strategic goals in the Forest's 2010 LRMP.

3.1 Fire Management Considerations Applicable to All Forest Fire Management Units

General Management Considerations

Wildland fire within the Boise National Forest is managed according to the strategic direction and emphasis identified within the three FMUs and various 2010 LRMP management areas.

FMU 1 allows for the full range of fire management options including achievement of resource objectives using unplanned ignitions (2003 LRMP FEIS p 3-650).

FMU 2 emphasizes wildland-urban interface. Concerns related to threats to life and property may reduce or eliminate some options for implementing certain fire suppression strategies (2003 LRMP FEIS p 3-653). Partnerships and programs directed at homeowner FIREWISE practices on private property are a cornerstone for community protection.

In FMU 3 fires are managed using the full range of suppression objectives based on conditions and protecting values at risk (2010 LRMP p III-40).

Wildland Fire Management Options

As outlined in this FMP, a management response will be implemented for each wildland fire, though the response may vary depending on the FMU. The appropriate response will safely manage wildland fires consistent with land and resource management objectives and fire management direction while providing for public and firefighter safety. The full range of fire management options will be implemented on the Boise NF in 2014.

Wildland Fire Suppression - Consistent with Forest Service policy, Boise NF fire managers will undertake an initial attack fire suppression response on any human-caused wildland fire. A full range of strategies is available from limited or modified suppression to use of aggressive suppression tactics (2010 LRMP Guideline FMGU04).

Management of Unplanned Wildland Fire - Approximately 24 percent of the Forest is designated in the 2010 LRMP to allow, when appropriate and desirable, naturally ignited fire to be managed as a natural process. Wildland fire can be an essential tool in the restoration and maintenance of desirable plant community attributes, fuel levels, and ecological processes (2010 LRMP Goal FMGO03). A "Wildland

Fire Use (WFU) Planning Area" was identified in the 2003 LRMP FEIS. This area includes parts of or whole management areas. The management areas included in the WFU Planning Area are identified in the 2010 LRMP. The planning area in combination with other considerations was used as the basis for FMU 1. Through additional assessment and implementation, refinements to this boundary or the implementation criteria may occur.

3.1.1 Boise Land and Resource Management Plan Guidance Applicable Forest Wide

The 2010 LRMP provides direction at several levels including Forest-wide, Management Prescription Category (MPC) and Management Area. Forest-wide direction applies to all Management Areas but may be re-iterated within a Management Area to provide more context as to how that direction relates to a localized situation. Therefore in some cases Forest-wide direction may vary slightly between Management Areas. MPC intent and other associated direction are described at the Forest-wide level and re-iterated within the Management Area where individual MPCs are assigned. MPC direction is not in most cases tailored to the Management Area. Therefore MPC direction is, except in very rare instances, consistent from one Management Area to another. The same is true for Wild and Scenic Rivers in that direction associated with a designation (Wild, Scenic or Recreation) is established at the Forest-wide level and is therefore consistent where these designations are applied.

3.1.1.1 Desired Conditions

Fire—both prescribed and wildland—is used as a tool to achieve and maintain vegetative conditions and desired fuel levels. Fire plays a natural role where appropriate and desirable, but is actively suppressed where necessary to protect life, investments, and valuable resources. Fire operates within historical fire regimes appropriate to the vegetation type and management objectives. The selected suppression strategy is successful (2010 LRMP, Chapter III, Fire Management, p III-40).

3.1.1.2 Objectives

From 2010 LRMP, Chapter III, Fire Management, pages III-40 and III-41:

Objectives	FMOB01	Reduce fire fighter and public injuries and loss of life, and damage to communities from severe, unplanned and unwanted wildland fires by prioritizing fire fighter, public, and community safety above other concerns in fire management activities.
	FMOB02	During project planning, identify appropriate areas where prescribed fire could be used to meet management objectives. These areas may include intermingled landownership, and areas of concentrated investments, structures, or other resource concerns.
	FMOB03	Following identification of areas where wildland fire use is appropriate within management areas, aggregate common areas between management areas to fully describe the extent of wildland fire use implementation areas to be included in the Fire Management Plan. Develop the necessary implementation information for the areas and include in the Fire Management Plan.
	FMOB04	On a decadal basis, schedule and complete at least 50,000 acres of hazardous fuel reduction and maintenance treatments within the wildland urban interface (WUI).
	FMOB05	Continue to identify high fire hazard areas in wildland/urban interface areas. Develop and prioritize vegetation treatment plans in coordination with local and tribal governments, agencies, and landowners to reduce the risk from wildland fire.

	FMOB06	Enhance public awareness of the fundamental importance of fire through educational programs about the role of fire in the ecosystem.
	FMOB07	Coordinate vegetation management activities and partnership opportunities with local land managers and owners for wildland fire suppression and use, and prescribed fire.
	FMOB08	On a decadal basis, use prescribed fire to treat at least 100,000 acres. These treatments would contribute to accomplishment of VEOB08 and FMOB04.

3.1.1.3 Guidelines

From 2010 LRMP, Chapter III, Fire Management, page III-42:

Guidelines	FMGU01	An interdisciplinary team or resource advisor should be used to predetermine incident base and helibase locations. These locations should be described in the Fire Management Plans.
	FMGU02	When prescribed fire or wildland fire use areas burn more severely than prescribed or anticipated, with the potential for detrimental soil disturbance or loss of soil-hydrologic function, appropriate personnel should complete a field evaluation to determine the need for any rehabilitation measures.
	FMGU03	To minimize mechanical ground disturbance in RCAs, prescribed fire and wildland fire use should be considered viable tools to meet soil, water, riparian, and aquatic desired conditions.
	FMGU04	Consider a full range of appropriate management responses, from wildland fire use that benefits resources, to full suppression.
	FMGU05	Implementation information for wildland fire use described in the Fire Management Plan should include identification of sensitive ecological resources and social values. When it is determined that wildland fire use may degrade sensitive areas, prescriptions for wildland fire use should mitigate these effects.
	FMGU06	Direct ignition of prescribed fire in RCAs should not be used unless site/project scale effects analysis demonstrates that it would not degrade or retard attainment of soil, water, riparian, and aquatic desired conditions. Refer to SWRA Standard #4 for exceptions.

3.1.1.4 Goals

From 2010 LRMP, Chapter III, Fire Management, page III-40:

Goals	FMGO01	Firefighter and public safety is the priority in all fire management activities.
	FMGO02	Allow fire to play its natural role where appropriate and desirable to reduce the risk of uncharacteristic and undesirable wildland fires.
	FMGO03	Use fire alone or with other management activities to restore or maintain desirable plant community attributes including fuel levels, as well as ecological processes (see Vegetation Goals).
	FMGO04	Use fire alone or with other management activities to treat natural and activity fuels to a level that reduces the risk of uncharacteristic or undesirable wildland fires.
	FMGO05	Provide for protection of life, investments, and valuable resources through appropriate vegetation, fuel, and wildland fire management.
	FMGO06	Encourage and participate in partnerships with citizens or community-centered approaches to manage fire risks and hazards in wildland/urban interface areas.

3.1.1.5 Standards

Implementation of standards from the 2010 LRMP Fire Management; Threatened, Endangered, Proposed and Candidate Species; Soil, Water, Riparian and Aquatic Resources; Wildlife Resources; Botanical Resources and Non-Native Plants are addressed on the "Resource Mitigations for Wildfire Activities" poster per consultation with National Marine Fisheries Service and the U.S. Fish and Wildlife Service as required by TEOB23 in the Threatened, Endangered, Proposed and Candidate Species, 2010 LRMP, Chapter III, page III-10. The standards listed in Fire Management (2010 LRMP Standards FMST01, FMST02 and FMST03) are further re-iterated under TEOB23 and are included on the Resource Mitigations poster. In addition, standard fire management tactics and mitigations are covered by the *Biological Assessment/Biological Evaluation of the Effects to Threatened, Endangered, and Proposed Species: Programmatic for Wildfire Management Activities on the Boise National Forest.* Mitigations developed as part of the BA/BE are also included on the Resource Mitigations poster.

Objectives	TEOB23	Develop operational resources (maps, keys, desk guides, etc.) within 1 year of signing the ROD, to coordinate TEPC species concerns and practical mitigations, and include those resource tools in the Fire Management Plan. Consult with NMFS and USFWS on operational resources on an annual basis. As part of this process consider the following relative to initial attack: a) How these resource tools will be provided to initial attack personnel. b) Locations or identification of occupied TEPC plant habitat, TEPC fish-bearing streams, surface water with direct delivery to TEPC fish bearing streams and associated RCAs. c) Criteria and potential mitigation concerning decisions to place incident bases, camps, helibases, helispots, and other centers for incident activities within occupied TEPC plant habitat or RCAs. d) Criteria and potential mitigation concerning decisions to use draft hoses in TEPC fish- bearing streams that do not have appropriate screening. e) Criteria and potential mitigation concerning decisions to use chemical retardant, foam or other additives in RCAs where surface waters have direct delivery to TEPC fish-bearing streams. f) Criteria and potential mitigation concerning decisions to use heavy equipment in RCAs.
Standards	FMST01	Once a Wildland Fire Situation Analysis (WFSA) is approved, heavy equipment shall not be used to construct firelines within Riparian Conservation Areas (RCAs) unless: a) The line officer or designee determines that imminent safety to human life or protection of structures is an issue; OR b) The incident resource advisor determines and documents an escaped fire would cause more degradation to RCAs than would result from the disturbance of heavy equipment. In no case will the decision to use heavy equipment in RCAs be delayed when the line officer or designee determines safety or loss of human life or protection of structures is at imminent risk.

	FMST02	Once a WFSA is approved, incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities shall be located outside RCAs unless the only suitable location for such activities is determined and documented by the line officer or designee to be within an RCA. In no case will the decision to place these activities inside an RCA be delayed when the line officer or designee determines safety or loss of human life or structures is at imminent risk.
	FMST03	Once a WFSA is approved, avoid delivery of chemical retardant, foam, or additives to all surface waters within RCAs unless: a) The line officer or designee determines that imminent safety to human life or protection of structures is an issue; OR b) The incident resource advisor determines and documents an escaped fire would cause more degradation to RCAs than would result from the disturbance of heavy equipment. In no case will the decision to avoid delivery of chemical retardant, foam or additives to surface waters within RCAs be delayed when the line officer or designee determines safety or loss of human life or protection of structures is at imminent risk.

3.1.1.6 Management Prescription Categories (MPCs)

Direction and intent for Management Prescription Categories described in the 2010 LRMP apply where ever these MPCs are designated. The following describes the MPCs.

MPC1.2—Recommended Wilderness

This prescription applies to areas the Forest Service recommends for Wilderness designation. The primary management objective is to maintain wilderness attributes until Congress decides to designate the areas as wilderness or release them for some other form of management. Although these areas do not fall under the authority of the Wilderness Act, they are managed to maintain wilderness attributes where feasible, and to generally allow ecological processes (such as fire) to prevail.

MPC2.1—Wild and Scenic Rivers

This prescription applies to areas that have been Congressionally designated Wild, Scenic, or Recreational Rivers and their associated land corridors, which extend an average of 1/4 mile from each bank. Wild and Scenic Rivers and their corridors are managed to protect their free-flowing waters, outstandingly remarkable values (ORVs), and their classification status. A “Wild” classification is the most primitive or least developed. These rivers have essentially undeveloped corridors and are generally inaccessible except by trail. “Scenic” river corridors may have some development, and are accessible in places by roads. “Recreational” rivers are readily accessible by roads and often have development within their corridors.

MPC2.2—Research Natural Areas

This prescription applies to areas that have been administratively established as Research Natural Areas (RNAs) and that provide unique opportunities for research. Existing and proposed Research Natural

Areas are managed to protect the unique values for which they were established. Management plans are developed for each area to provide guidance and protection of values.

MPC2.3—Boise Basin Experimental Forest

The Boise Basin Experimental Forest is administered by the USDA Forest Service, Rocky Mountain Research Station, headquartered in Fort Collins, Colorado. This forest was originally established in the 1930s to conduct silvicultural and other related research in the ponderosa pine type. It includes the Bannock Creek Research Natural Area (445 acres), which was set aside to represent mixed conifer vegetation in the management area. The RNA has also been identified as a potential National Natural Landmark. Most activities on the Experimental Forest are for research purposes. Other activities may occur if they do not adversely affect past, ongoing, or planned research.

MPC3.1—Passive Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Conditions

This prescription is designed to minimize temporary-term risks and avoid short- and long-term risks from management actions (suppression activities are not defined as a management action) to soil/hydrologic conditions and aquatic and terrestrial habitats. The objective of MPC3.1 is to keep management-related impacts from degrading existing conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies. Low levels of management activities occur, and these activities are expected to have minimal and temporary degrading effects to soils, water quality, riparian areas, and aquatic and terrestrial habitats. Other uses and activities, such as salvage harvest or wildland fire use, may occur and may have some temporary effects, provided they do not retard attainment of short- and long-term objectives for aquatic and terrestrial habitat, or soil/hydrologic resources. Tools associated with this prescription—such as special order restrictions, operating plan adjustments, and prescribed fire—are typically of low intensity and designed to maintain existing conditions, primarily through ecological processes.

MPC3.2—Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Conditions

This prescription is designed to minimize temporary- and short-term risks and avoid long-term risks from management actions (suppression activities are not defined as a management action) to soil/hydrologic conditions and aquatic, botanical and terrestrial habitats. The objective of this prescription is to actively restore or maintain conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies through a combination of management activities and natural processes. Management activities used to achieve this objective include watershed restoration, noxious weed treatments, and vegetative treatments that include prescribed fire, wildland fire use, and mechanical. Restoration is focused on those components of the ecosystem that are not functioning properly, or are outside the range of desired conditions, while maintenance helps to preserve those components that are functioning properly.

MPC4.1a—Undeveloped Recreation: Maintain Inventory Roadless Areas

This prescription applies to lands where dispersed and undeveloped recreation uses are the primary emphasis. Providing dispersed recreation opportunities in an inventoried roadless area is the primary objective. Both motorized and non-motorized recreation opportunities may be provided. Other resource uses are allowed to the extent that they do not compromise the roadless and undeveloped character of the IRA. The area has a predominantly natural-appearing environment, with slight evidence of the sights and sounds of people. Species habitat and recreational uses are generally compatible, although recreation uses may be adjusted to protect TEPCS species.

MPC4.1c—Undeveloped Recreation: Maintain Unroaded Character with Allowance for Restoration Activities

This prescription applies to lands where dispersed recreation uses are the primary emphasis. Providing dispersed recreation opportunities in an unroaded landscape is the predominant objective. Both motorized and non-motorized recreation opportunities may be provided. Other resource uses are allowed to the extent that they do not compromise the unroaded character. The area has a predominantly natural-appearing environment, with slight evidence of the sights and sounds of people. Species habitat and recreational uses are generally compatible, although recreation uses may be adjusted to protect TEPCS species.

MPC4.2—Roaded Recreation

This prescription applies to lands where dispersed and developed recreation uses are the primary emphasis. A wide range of recreational activities and developments occurs. Facilities are maintained, and both motorized and non-motorized recreation opportunities may be provided. Multiple uses such as timber harvest and grazing are allowed to the extent that they do not compromise recreation resource objectives. Human use and presence are generally obvious. The area has a predominantly natural-appearing environment, with moderate evidence of the sights and sounds of people. Generally, a mix of mechanical and fire activities are used to treat vegetation to achieve desired conditions for recreation settings and developments, and to reduce the risk of uncharacteristic vegetative damage or loss from insects, diseases, and fire.

MPC5.1—Restoration and Maintenance Emphasis within Forested Landscapes

This prescription applies to lands that are predominantly (> 50%) forested. Emphasis is on restoring or maintaining vegetation within desired conditions in order to provide a diversity of habitats, reduced risk from disturbance events, and sustainable resources for human use. Commodity production is an outcome of restoring or maintaining the resilience of forested vegetation to disturbance events; achievement of timber growth and yield is not the primary purpose. The full range of treatment activities may be used. Restoration occurs through management activities and ecological processes. Combinations of mechanical and fire treatments are used to restore forested areas while maintaining or improving resources such as soils, water quality, fish and wildlife habitat, and recreation settings. The

risk of temporary and short-term degradation to the environment is minimized, but impacts may occur within acceptable limits as resources are managed to achieve long-term goals and objectives.

MPC6.1—Restoration and Maintenance Emphasis within Shrubland and Grassland Landscapes

This prescription applies to lands that are predominantly (> 50%) shrubland and grassland. Emphasis is on restoring and maintaining vegetation within desired conditions in order to provide a diversity of habitats, reduced risk from disturbance events, and sustainable resources for human use. The full range of treatment activities may be used. Restoration occurs through management activities and natural processes. Combinations of mechanical and fire treatments are used to restore shrubland and grassland areas while maintaining or improving resources such as soils, water quality, fish and wildlife habitat, and recreation settings. The risk of temporary and short-term degrading effects to the environment is minimized, but impacts may occur within acceptable limits as resources are managed to achieve long-term goals and objectives.

Figure 5 displays the locations of MPCs across the Forest for all MPCs except MPC2.1 (Wild and Scenic River segments). Figure 4 displays the Wild and Scenic River segments. LRMP guidelines associated with the MPCs other than Wild and Scenic River are in Table 1 and those for Wild and Scenic Rivers are in Table 2. Table 3 provides a description of the Research Natural Areas which are MPC2.2.

Figure 3—Management Prescription Categories on the Boise National Forest

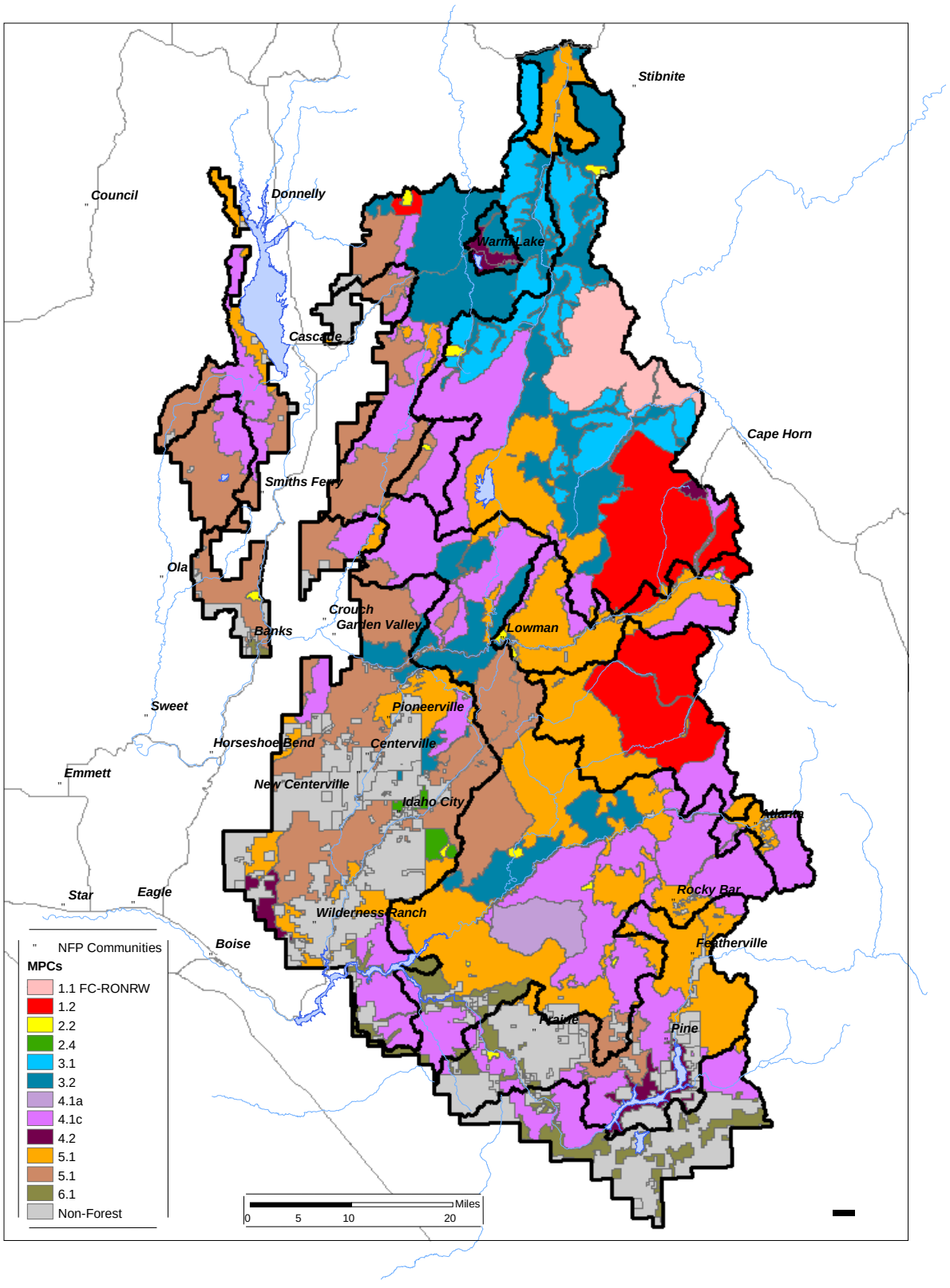


Table 1—Guidelines associated with the MPCs

MPC	The full range of fire suppression strategies is available forest-wide. To be consistent with the MPC:
1.2	Emphasize tactics that minimize impacts of suppression on wilderness values. To meet the intent: use MIST.
2.1	Emphasize strategies and tactics that minimize the impacts of suppression on river classification and Outstandingly Remarkable Values (ORVs). To meet the intent: use MIST in Wild segments. See Section f-1 for a description of the segments and summary of ORVs.
2.2	Emphasize strategies and tactics that minimize impacts to the values for which the RNA was established. To meet the intent: use MIST.
2.3	Emphasize strategies and tactics that minimize impacts to experimental areas and other investments.
3.1	Emphasize strategies and tactics that minimize impacts to aquatic, terrestrial, or watershed resources. To meet the intent: use MIST.
3.2	Emphasize strategies and tactics that minimize impacts to aquatic, terrestrial, or watershed resources. To meet the intent: use MIST.
4.1a	Emphasize tactics that minimize impacts on the roadless or undeveloped character of the area. To meet the intent: use MIST.
4.1c	Emphasize tactics that minimize impacts of suppression activities on the unroaded landscape. To meet the intent: limit the development of dozer line. However, if terrain and vegetation allow for rehabilitation of dozer line to the point that the landscape retains its unroaded character, dozer line may be allowable.
4.2	Emphasize strategies and tactics that minimize impacts to recreation developments and investments.
5.1	Emphasize strategies and tactics that minimize impacts to developments and investments.
6.1	Emphasize strategies and tactics that minimize impacts to developments and investments.

Figure 4—Wild and Scenic River Segments with FMUs

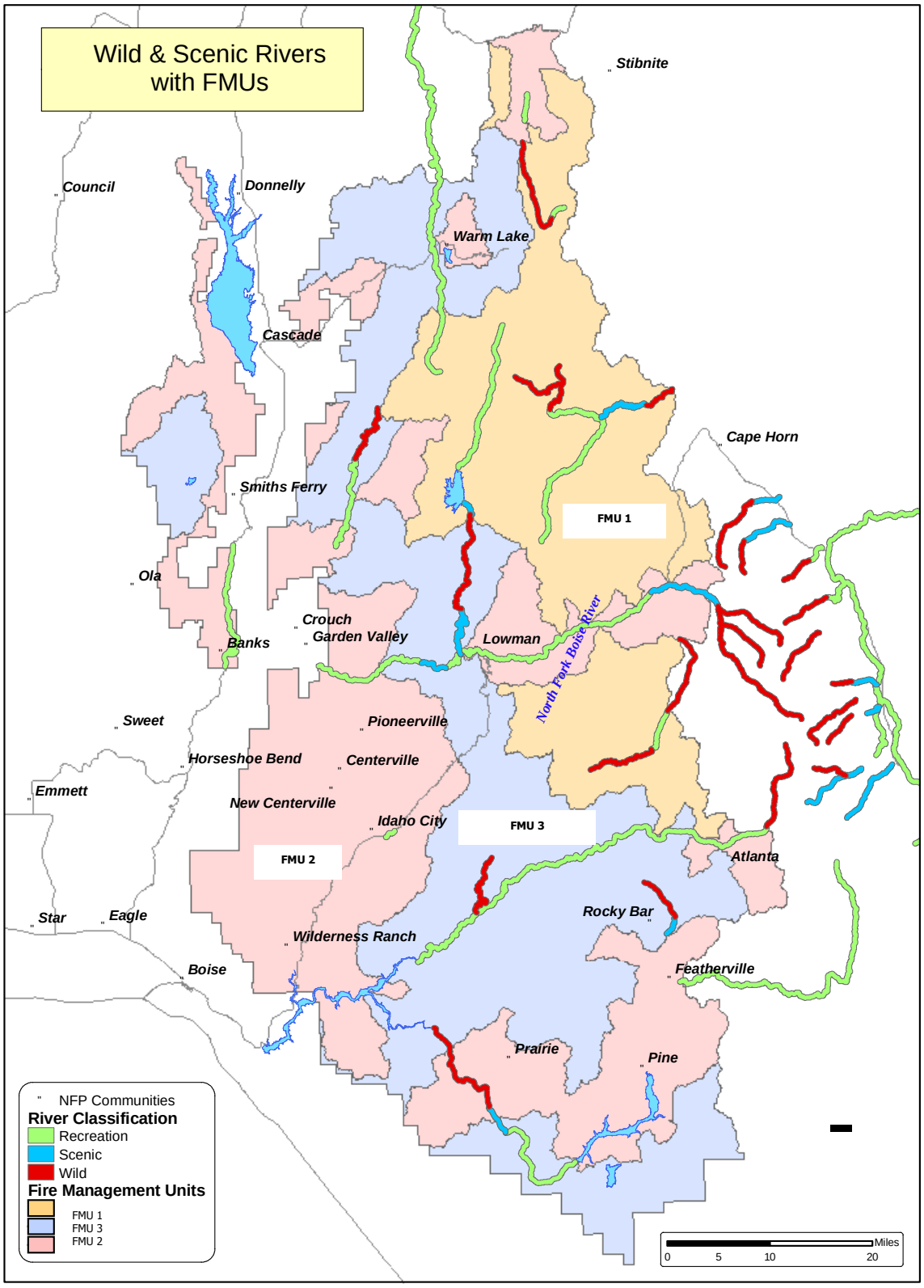


Table 2—Wild and Scenic River Segments (MPC 2.1) and their Outstandingly Remarkable Values
Note: The following describes the segment location and classification, and an indication of the Outstandingly Remarkable Values (ORVs) that apply to the segment. A more detailed description of the ORVs for each river follows.

River Name	Segment Location	Class[1]	Scenic[2]	Recreation	Geologic	Hydro	Fish	Wildlife	Heritage	Eco/Bot
Bear Valley Creek	Headwaters to confluence with Elk Ck.	R							O	
Bear Valley Creek	Elk Creek confluence downstream to Fir Creek Campground	S							O	
Bear Valley Creek	Fir Creek Campground to Forest Boundary	W							O	
Burntlog Creek	Headwaters to junction with FR447 (Sec 27 T16N R8E)	R					O			
Burntlog Creek	Junction with FR447 (Sec 27 T16N R8E to confluence with Johnson Creek	W					O			
Deadwood River	Headwaters to Deadwood Reservoir	R			O					
Deadwood River	Deadwood Reservoir to Warm Springs Creek	S	O	O						
Deadwood River	Warm Springs Creek to Pine Creek	W	O	O						
Deadwood River	Pine Creek to the confluence with South Fork Payette River	S		O						
Elk Creek	Headwaters to Alta Creek Confluence	W							O	
Elk Creek	Alta Creek Confluence to confluence with Feather River	S							O	
Elk Creek	Bear Valley confluence upstream to FC-RONR Wilderness boundary	R					O			
Elk Creek	FC-RONR Wilderness Boundary upstream to North Fork Elk Creek	W					O			
Johnson Creek	Bear Creek to Hansen Creek	R							O	
Middle Fork Boise River	Forest Boundary to Willow Creek	R	O						O	O
Middle Fork Payette River	Bell Creek to Boiling Springs Cabin	R	O						O	
Middle Fork Payette River	Boiling Springs Cabin to Fool Creek	W	O	O						
Mores Creek	Granite Creek to Pine Creek	R							O	
North Fork Boise River	Wilderness Boundary to Johnson Creek	R	O							
North Fork Boise River	Johnson Creek to Hunter Creek	W	O							

[1] Class = Classification of the river segment. W = Wild, R = Recreational, and S = Scenic
[2] Scenic, Recreation, Geologic, Hydro, Fish, Wildlife, Heritage, Eco/Bot = Outstandingly Remarkable Values. Scenic = Scenic Value, Recreation = Recreation Value, Geologic = Geologic Value, Hydro = Hydrologic Value, Fish = Fish Value, Wildlife = Wildlife Value, Eco/Bot = Ecological/Botanical Value.

River Name	Segment Location	Class[1]	Scenic[2]	Recreation	Geologic	Hydro	Fish	Wildlife	Heritage	Eco/Bot
North Fork Boise River	Rabbit Creek to Middle Fork Boise River	W	O							
North Fork Payette River	Forest Boundary to confluence with Payette River	R		O						

River Name	ORV Description
Bear Valley Creek	**Heritage:** There are two historic sites and nine prehistoric sites eligible for listing on the National Register of Historic Places. Also being considered for eligibility is Forest Road 582. There is also substantial evidence for other sites, including those associated with homesteading, early Forest Service administration, and the post World War II mining industry.
Burntlog Creek	**Fish:** This is a priority watershed that supports spawning and rearing habitat for wild native chinook salmon and steelhead, cutthroat, redband, and bull trout.
Deadwood River	**Scenic:** Portions of this area have an isolated and remote steep-walled forested canyon setting, with little evidence of past management activities. **Geologic:** The Deadwood Canyon Fault, the first major Basin and Range Structural control west of the Middle Fork Salmon River, extends north to Yellow Pine, where it intersects the East Fork Salmon Fault System. The area is of educational and scientific value because of the rare physical features being exhibited. **Recreation:** This river offers extremely challenging kayaking opportunities.
Elk Creek (tributary to Feather River)	**Heritage:** This area includes the South Boise Historic Mining District.
Elk Creek (tributary to Bear Valley Creek)	**Fish:** This is a priority watershed that supports spawning and rearing habitat for wild native chinook salmon and steelhead, cutthroat, redband, and bull trout.
Johnson Creek	**Heritage:** There are twelve to fourteen historic sites and ten prehistoric sites on Johnson Creek that are eligible for listing on the National Register. They consist primarily of homesteads and sites associated with the Thunder Mountain gold rush. Two of these sites are Forest Service administered compounds: Johnson Creek Guard Station and Landmark Ranger Station.
Middle Fork Boise River	**Scenic:** The river offers diverse settings, from steep narrow canyon walls to wide valley bottoms. **Heritage:** Arrowrock Dam, Alturas Bar, and Kirby Dam are listed on the National Register of Historic Plances. **Ecological/Botanical:** The river area includes the presence of nine documented population sites for Epipactis gigantea (Giant helleborine orchid). All of these sites are in direct assocation with thermal hot springs, a rare habitat.

River Name	ORV Description
Middle Fork Payette River	**Scenic:** There is strong water movement with diversity and variety of slow-moving water, pools, cascades, ripples, small falls, and rapids. There is a natural appearing forested setting interspersed with natural openings. There is little evidence of human alteration other than the road corridor in locations. **Recreation:** The rivers includes several hot springs. **Heritage:** Historically, this river area was a popular transportation corridor linking the agricultural communities along the North and South Fork Payette Rivers. Portions of Forest Road 698 are built on a wagon road. This road is not recorded as a site, but is considered eligible for the National Register of Historic Places. Boiling Springs Guard Station is a National Register eligible. There are eight prehistoric sites that are eligible for listing on the National Register.
Mores Creek	**Heritage:** The area includes Hop Lee's Placer Claim.
North Fork Boise River	**Scenic:** The river has a diverse character offering steep-sided, narrow rocky canyons with clear fast water, rapids, cascades, and boulders.
North Fork Payette River	**Recreation:** The river corridor corresponds with the Payette River Scenic Byway Corridor.
Payette River	**Recreation:** River corridor includes the Banks River Access Site.
Porter Creek	**Fish:** This is a priority watershed that supports spawning and rearing habitat for wild native chinook salmon and steelhead, cutthroat, redband, and bull trout.
South Fork Boise River	**Scenic:** The river area includes a steep-walled basalt canyon with talus slopes, rock formations, canyon enclosures, and isolation. **Recreation:** The river corridor offers a wide variety of recreational activities. **Geologic:** The river area includes a seemingly continuous sequence of volcanic, metavolcanic, metamorphic, metasedimentary, and volcanic features. **Heritage:** Danskin Rockshelter is found in this river area.
South Fork Payette River	**Scenic:** Portions of the South Fork Payette River area are dominated by the presence of the river and steep canyon landforms. With the exception of the roadway, road cuts, and fill banks, the river offers a natural appearing setting. There is a dramatic contrast between forested and non-forested slopes on the north and south aspects of the canyon. **Recreation:** This river offers a wide variety of recreation activities. **Heritage:** Big Falls Portage is in this river area and has yielded significant information about the prehistory of the South Fork Payette. **Ecological/Botanical:** The river area includes the presence of nine documented population sites for Epipactis gigantea (Giant helleborine orchid). All of these sites are in direct assocation with thermal hot springs, a rare habitat.

Table 3—Research Natural Areas (MPC 2.2)

Note: Management direction specific to Research Natural Areas is described in the establishment record or RNA management plans. However management plans, which should describe the types of fire management actions appropriate for the RNA, currently exist for only a few areas. In the interim, establishment records should be used to determine appropriate actions based on the RNA values.

RNA Name	Acres	Forest Plan Management Area	Vegetative Community/Features
Raspberry Gulch	640	1	Douglas-fir forest, ponderosa pine woodland, big mountain sagebrush
Elk Creek Enclosure	110	2	Grassland community
Trinity Mountain	190	2	High alpine plant communities
Roaring River	423	6	*Happlopappus aberrans* community
North Fork Boise River	876	7	Riparian habitat with rare plant, *Chaenactis evermanii*
Bannock Creek	445	8	Ponderosa pine, Douglas-fir, aspen, and shrub communities
Monumental Creek	678	10	Ponderosa pine woodland and bluebunch wheatgrass community
Lowman	380	10	Ponderosa pine community
Bear Creek	387	10	Sagebrush-grass community
Eggers Creek	325	15	Douglas-fir community with steep-to-moderate stream gradient
Dry Buck	582	17	Grand fir/rocky mountain maple community at southern limits of grand fir
Needles	1,87	18	Alpine lake, wet meadows, older glades, subalpine fir types
Back Creek	1,368	19	Subalpine fir habitat types
Chilcoot Peak	1,306	21	Small alpine lake and pond, climax lodgepole pine with Idaho fescue understory

3.1.2 Physical Characteristics that Apply to All Fire Management Units

Climate

Climate within the Boise National Forest strongly influences human uses and resources, and ecological processes such as biological productivity, fire regimes, soil erosion, and stream flow. The Forest area located north and east of the Snake River lies within the "Northern Rockies" transitional climate zone.

Climate patterns are typically moist and cold in the winter and early spring, and warm to hot and dry during the summer and early fall. The winter climate is influenced by mountain ranges that block most arctic air from entering the Forest. The Snake River and Salmon River valleys, however, can funnel dry arctic air into the basin where it often stagnates. In the late spring and summer, moisture from the Gulf of Mexico may move north and combine with warm temperatures and steep topography to produce brief but high-intensity thunderstorms. Late spring events generally have more precipitation, with 24-hour accumulations often greater than one inch. Dry lightning is more common during summer and fall.

Winter temperatures average between 9 and 29 degrees Fahrenheit. Snowfall ranges from about 55 to 70 inches, with greater amounts at higher elevations. Despite cold winter temperatures, occasional marine intrusions enter the area, with rainfall occurring mainly at elevations below 5,000 feet. These intrusions can produce rain-on-snow events that sometimes trigger floods and landslides. Increased exposure to the maritime air masses supports vegetative communities tied to moister climatic regimes as one moves progressively north within the area. Average summer temperatures can reach over 100 degrees in lower elevations, with higher elevations in the 80s to 90s. Growing seasons vary greatly, from less than 30 days in the highest elevation areas to over 150 days in the lower valleys.

Topography

Elevations vary greatly across the Forest. This wide range of elevations encompasses a great diversity of geology, flora, and fauna. At least six major landforms have resulted from past geomorphic processes:

- High-elevation distinctive mountains and valley formed from past glaciation;
- More subtle high-elevation topography formed by freezing and thawing processes;
- Lands with sharply defined drainage patterns formed by stream-cutting action;
- Depositional lands formed from eroded materials from higher lands;
- Lands formed by volcanic flows.

The topography of the Forest and relationship to the Snake River Plateau to the south and Columbia Plateau to the west contributes to orographic lift that produces lightning over the entire Forest. Marine weather from the west and monsoonal weather from the south are often funneled through the many river drainages that flow to the south and west. Watersheds on the Forest drain into the Snake and Salmon River Basins and the Forest includes important portions of the Snake, Salmon, Payette, and Boise River systems. Because many of the watersheds on the Forest are oriented in the same direction as the prevailing summer weather patterns, the topography contributes to the general movement of fires across the Forest.

3.2 Fire Management Considerations for Specific Fire Management Units

3.2.1 FMU 1

3.2.1.1 FMU 1 Snap Shot

- FMU Number: 1
- Nearest Weather Station: Bearskin RAWS; Teapot & Horton Peak RAWS can also be representative of this FMU
- Fire Behavior Indicator: Energy Release Component (ERC)
- Acres/Agency: 565,000 acres--all USFS-Boise National Forest (BOF) protection
- Predominant Vegetation Types: Almost 50% of this FMU is dominated by cool, dry and cool, moist Douglas-fir or subalpine fir types; about 30% is comprised of persistent lodgepole pine types, and close to 15% is ponderosa pine types at the lower elevations.
- IA Dispatch Office: Boise Interagency Dispatch Center
- Communities adjacent or within the FMU: Yellow Pine/Johnson Creek; Highway 21-Lowman corridor (scattered private inholdings); and adjacent to Atlanta at its southernmost tip
- 2010 LRMP options available for response to ignitions: Unplanned ignitions may be managed for resource and/or protection objectives. The full range of suppression strategies may be used to manage wildfires, with an emphasis to allow naturally ignited wildfires to play, as nearly as possible, their ecological role where appropriate and desirable.

3.2.1.2 FMU 1 Guidance

FMU 1 includes lands identified within the 2010 LRMP as the area most appropriate for the implementation of wildland fire use. FMU 1 has the lowest occurrence of human-caused fires compared to the other two FMUs; the majority of the fire starts within this FMU are lightning-caused.

In general, FMU 1 is located on the eastern side of the Boise NF, on relatively remote portions of the Forest that border the Sawtooth Wilderness and Franck Church-River of No Return (FC-RONR) Wilderness. This FMU is located within Elmore, Boise, and Valley Counties. FMU 1 is the smallest of the FMUs and covers approximately 565,000 acres of land protected by the Boise NF. FMU 1 generally borders FMU 3 to the west, although portions also abut FMU 2 including the interface around Atlanta, the Lowman Highway corridor, Silver Creek (west of Deadwood Reservoir), and Johnson Creek/Yellow Pine. The FMU is organized into three geographically distinct subunits: Caton Lake, Bear Valley, and Trapper-Flat. Bear Valley is the largest of the subunits (407,000 acres) and Caton Lake is the smallest (9,600 acres). The Trapper-Flat subunit is 148,000 acres.

The total area within FMU 1 is made up of the following 2010 LRMP Management Areas: BNF05 (9%), BNF07 (11%), BNF10 (19%), BNF12 (13%), BNF13 (17%), BNF15 (4%), BNF19 (3%), BNF20 (8%), and BNF21 (5%). Fire management within BNF22 is covered by the FC-RONR Wilderness Plan. Table 4 and section 3.2.1.2.5 display the MPCs within this FMU.

Table 4—Management Prescription Categories Assigned to FMU 1

MPC	Percent of FMU
1.1	10
1.2	27
2.2	<1
3.1	16
3.2	16
4.1c	13
4.2	<1
5.1	17

3.2.1.2.1 Desired Conditions

- Forest-wide desired conditions apply.

3.2.1.2.2 Objectives

- Forest-wide objectives apply. FMOB05 provides the LRMP direction for establishing this FMU (2010 LRMP p III-40).

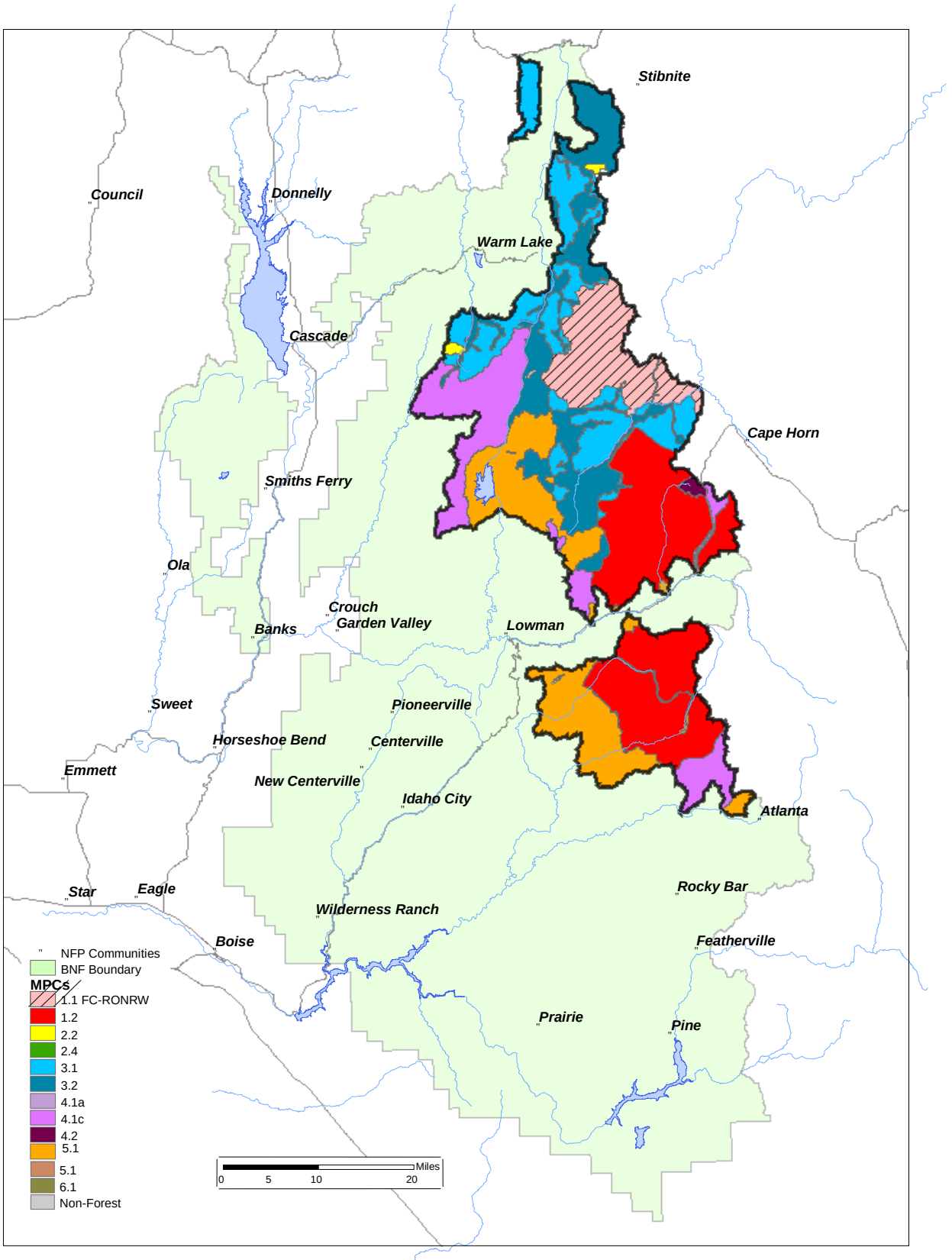
3.2.1.2.3 Guidelines

- Forest-wide guidelines apply. FMGU04 and FMGU05 provide the LRMP direction for managing fire within this FMU (2010 LRMP p III-42).

3.2.1.2.4 Goals

- Forest-wide goals apply.

3.2.1.2.5 *Management Prescription Categories for FMU 1*



3.2.1.2.6 Management Area Direction

- Coordinate with the Sawtooth, Salmon-Challis, and/or Payette National Forests to develop compatible wildland fire suppression and wildland fire use strategies.
- Use prescribed fire as appropriate in burned areas (within 1994 Rabbit Creek Fire) as vegetation recovers from disturbance. Identify and implement maintenance underburns within areas that experienced low intensity wildfire in 1994.

3.2.1.3 FMU 1 Characteristics

3.2.1.3.1 Safety

Only qualified personnel who promote safe and skillful application of fire management strategies and techniques will carry out fire management operations.

Fire management operations will not be initiated until all personnel on the ground receive a safety briefing describing known hazards and mitigating actions, current fire season conditions, and current and expected fire weather and behavior.

3.2.1.3.2 Physical

Fire Season Determination – Because FMU 1 is a higher elevation FMU, the actual fire season for this area would generally occur from June 15 through October 1.

Fire Regime Alteration - FMU 1 has the most area on the Forest in the historically lethal (V) and mixed (III) fire regimes when compared to the other FMUs. These two fire regimes are most dominant in the northern portion of the FMU. This FMU has the least amount of area in the historically nonlethal (I) fire regime, which occurs mostly in the southerly portion of the FMU.

Historical Fire Regime[1]	**Percent of FMU**
Forested Communities	
I (nonlethal)	14
III (mixed1 to mixed2)	45
IV (mixed2 to lethal)	29
V (lethal)	2
Non-Forested Communities	
II (mixed2)	10

3.2.1.3.3 Biological

- FMU 1 contains numerous water bodies and non-vegetated areas. The largest water body is Deadwood Reservoir. There are also a multitude of smaller mountain lakes and wetland areas scattered throughout the FMU.
- The dominant fuel conditions found in FMU 1 likely to affect fire behavior are described below:
    - Ponderosa pine habitats typically dominate southerly aspects at lower elevations ranging from valley bottoms to mid-elevations characterized as warm and dry conditions. Associated understory fuels range from light grass and sedge, herbs, and shrubs with varying levels of conifer regeneration. Fire Behavior Prediction System

(FBPS) Fuel Model 2 and 9 is representative of these areas. At the lower elevations of the ponderosa pine range, the north aspects are still dominated by ponderosa pine, though of higher stand density with increased levels of understory vegetation. At the higher elevation range, Douglas-fir becomes more co-dominant or dominant within these stands. National Fire Danger Rating System (NFDRS) Fuel Model C is representative of these stands.

- In the cooler wetter conditions associated with north slopes or higher elevations, Douglas-fir and true firs begin to dominate the landscape. As the elevations increase, the vegetation transitions to subalpine fir. Ponderosa pine may still exist at lower elevations, but is a minor component of the overall stand makeup. Southerly aspects may be relatively open if moisture limited, but north slopes will be heavily forested with well-developed understory shrubs and multi-storied conifer development. Understory fuels range from relatively open surface fuels to dense shrubs and heavy concentrations of dead and down material. FBPS Fuel Models 8 and 10 are representative of these stands, though FM 5 is likely more representative in the stands dominated by understory shrubs. NFDRS Fuel Model G is representative of these stands.
- Lodgepole pine will typically dominate cold frost pockets, more prevalent at mid to higher elevations throughout the forest. Depending on the age of the lodgepole stands, the associated fuels may be relatively light to dense brush with concentrations of dead, downed material and emerging spruce regeneration. FBPS Fuel Models 8 and 10 are representative of these stands. NFDRS Fuel Model G is representative of these stands.

3.2.1.3.4 Resources

Recreational activities within FMU 1 are primarily dispersed, and include hunting, hiking, backpacking, rafting, and camping. Many forest visitors access the Sawtooth and FC-RONR Wildernesses from developed campgrounds and trailheads.

3.2.1.4 FMU 1 Fire Environment

The fire environment and fire management situation on the Boise NF is shaped by a variety of factors, including unique weather patterns, topographic influences, fuel conditions, and organizational status. FMU 1 is, in general, higher elevation landscapes with longer interval fire regimes than the other two FMUs.

The Boise NF has the primary wildland fire protection responsibility within FMU 1. The sole exception to this is the portion of the FMU that falls within Management Area 22 which is located within the FC-RONR Wilderness. The Salmon-Challis NF has fire management responsibility for this portion of the FMU.

3.2.1.4.1 Historical Fire Occurrence 2004-2013

Approximately 251 wildland fires have originated in FMU 1 since 2004 (Figure 5) representing 20 percent of the total fires on the Boise NF. Five percent of the fires in this FMU are human-caused and 95 percent are caused by lightning. The number of human-caused fires is lowest in this FMU compared to the other

two. About 283,100 acres have burned since 2004 representing 37 percent of all the acres burned on the Forest.

The most number of fires occurred in August (Figure 5). However, July accounted for the greatest number of acres burned (Figure 6). The majority of the fires and acres burned occurred at elevations over 6,000 feet (Figure 7).

Figure 5—Total Number of Fires in FMU 1 from 2004 through 2013 by Month by Cause

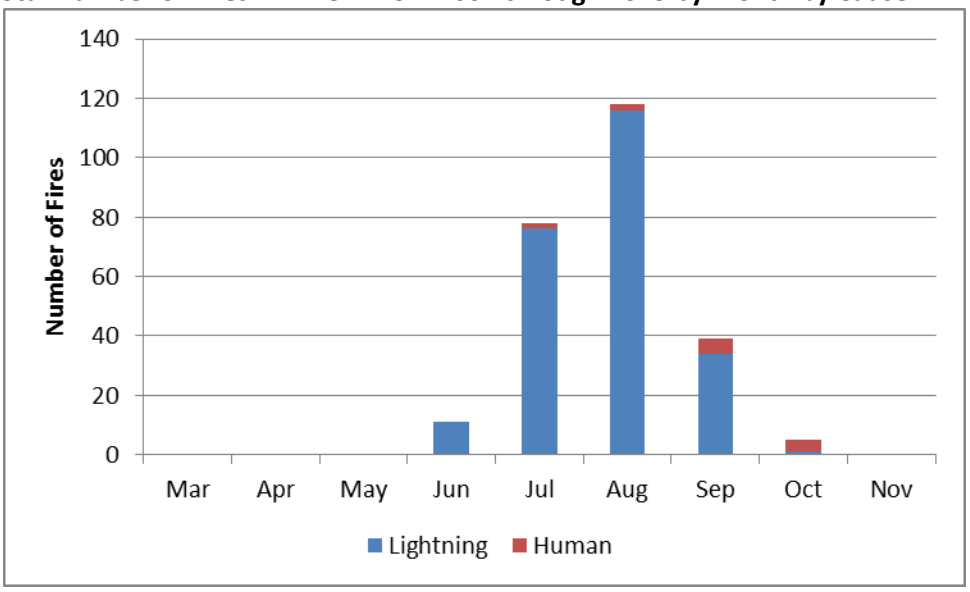


Figure 6—Total Acres Burned in FMU 1 from 2004 through 2013 by Month by Cause

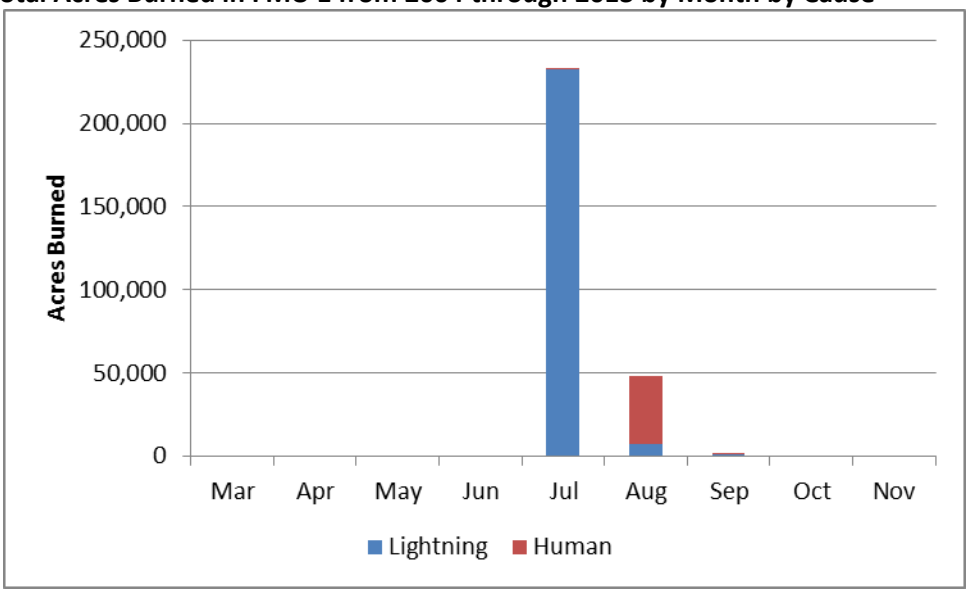
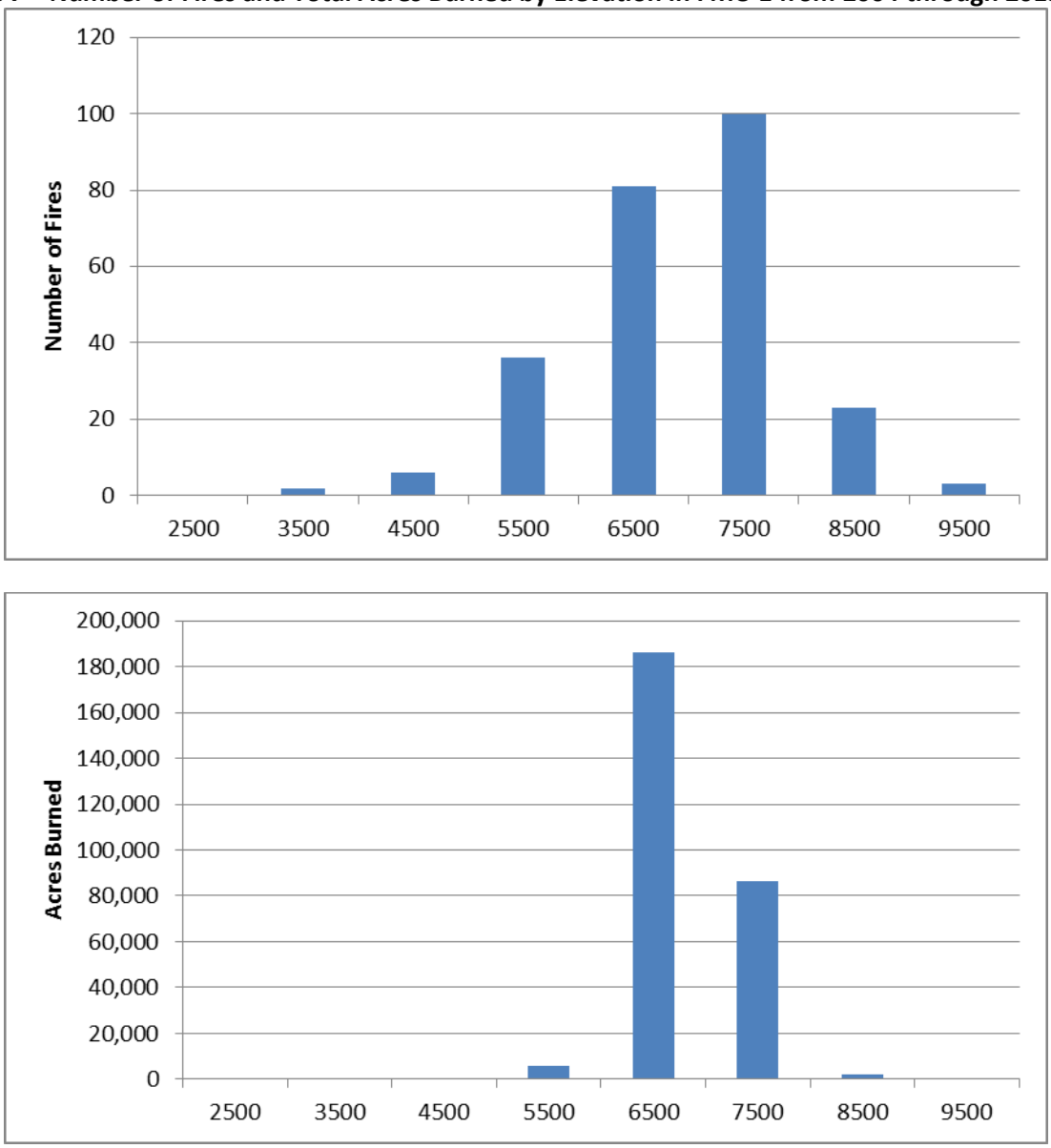


Figure 7—Number of Fires and Total Acres Burned by Elevation in FMU 1 from 2004 through 2013



3.2.1.4.2 Fire Behavior

Control Problems and Dominant Topographical Features - Approximately one-quarter of FMU 1 is located within the South Fire Zone, primarily within the subwatersheds that flow into the Middle Fork Boise River, North Fork Boise River, and Crooked River drainages. Incised river canyons and steep side slopes ranging from 5,000 feet in the canyon bottoms to 8,800 feet of various mountain peaks characterize these areas. The three main river canyons influence fire behavior across the general area largely due to the similar alignment of the river drainages with the prevailing wind direction for southwest Idaho. Many of the wildland fire starts within these river canyons became large and exhibit very high to extreme rates of spread.

A majority of FMU 1 is located within the Cascade, Lowman and Idaho City Ranger Districts. Here, the FMU is characterized by north-south oriented drainages. Johnson Creek, Bear Valley, Deadwood River, Eight Mile Creek, and Warm Springs Creek are major features that define the topography of this portion of FMU 1 and influence fire behavior. Historically, wildland fires within this area spread toward the east across ridges and channel toward the north as the major drainages influence the general wind patterns. Due to the nature of the topography and vegetation, fires within this FMU tend to be persistent and prolonged, especially during dry years.

3.2.1.4.3 Weather

- West winds averaging 7 mph, average low relative humidity of 28 percent and average high relative humidity of 74 percent are prevalent in June. Average low temperatures are 42°F and average high temperatures are 67°F.
- Dry lightning is most prevalent from mid-July to mid-September due to only the upper edges of the monsoons reaching the Forest.
- Hot, dry, and unstable conditions usually occur from mid-July through August, leading to the potential for plume-dominated fire behavior. Fire behavior begins to subside in late September and October due to shorter days, decreasing temperatures, higher relative humidity, less wind, moisture from the Pacific Ocean, and monsoons moving farther north.
- Dry and mild conditions may occur in late October (sometimes referred to as an Indian summer) leading to a period of increased fire behavior potential before the onset of winter. During this time of cooler temperatures in the mornings and nights, there is often an increase in human-caused fires, usually warming fires left by hunters.
- This FMU is higher in elevation than FMU 2 and FMU 3 and receives between 30 to 50 inches of precipitation in a year. Average precipitation from May through September is: 2.0 inches in May; 1.6 inches in June; 0.5 inches in July; 0.8 inches in August; and 1.0 inches in September.

3.2.2 FMU 2

3.2.2.1 FMU 2 Snap Shot

- FMU Number: 2
- Nearest Weather Station: Pine Creek and Town Creek RAWS; in addition, Fleck Summit RAWS best represents the southeast portion of the FMU.
- Fire Behavior Indicator: Energy Release Component(ERC), Burning Index (BI)
- Acres/Agency: 1,006,200 acres—mixed protection responsibility with BOF, IDL, SITPA, and Boise District BLM. Boise NF lands are significantly interspersed with private and/or state inholdings.
- Predominant Vegetation Types: Almost half (50%) of this FMU is dominated by lower elevation ponderosa pine types; about 30% are the cool, dry and cool, moist Douglas-fir and true fir types; and about 25% is non-forested (shrub covered) types.
- IA Dispatch Office: Boise Interagency Dispatch Center
- Communities adjacent or within the FMU: Since this FMU comprises the majority of WUI areas found on the Forest, it contains the primary communities and associated surrounding areas found within the administrative boundaries of the Forest as well as areas surrounding communities adjacent to the Forest boundary. This includes: Yellow Pine/Johnson Creek, Warm Lake, Cascade area, High Valley, Garden Valley/Crouch, Lowman corridor, Idaho City, Centerville, Placerville, Atlanta, and the Featherville/Pine area.
- LRMP options available for response to ignitions: Unplanned ignitions are managed for protection objectives. The full range of suppression strategies are available to manage wildfires, however a high emphasis is placed on protection of life, property and critical infrastructure.

3.2.2.2 FMU 2 Guidance

FMU 2 contains the WUI and associated lands within the Boise NF (Table III-1 and Table III-2). As identified in the 2010 LRMP, this FMU is composed of an aggregation of 6th field subwatersheds containing private residential structures that would influence fire management decisions.

The total FMU area is made up of the following 2010 LRMP Management Areas: BNF01 (10 percent), BNF02 (10 percent), BNF03 (4 percent), BNF04 (6 percent), BNF05 (4 percent), BNF08 (15 percent), BNF09 (2 percent), BNF10 (13 percent), BNF11 (5 percent), BNF14 (7 percent), BNF15 (3 percent), BNF16 (5 percent), BNF17 (7 percent), BNF18 (3 percent), BNF19 (2 percent), and BNF21 (4 percent). Table 5 and section 3.2.2.2.4 display the MPCs within this FMU.

Table 5—Management Prescription Categories Assigned to FMU 2

MPC	FMU 2
1.2	1
2.2	<1
2.4	1
3.2	4
4.1c	27
4.2	4

5.1	60
6.1	2

3.2.2.2.1 Desired Conditions

- Forest -wide Desired Conditions apply

3.2.2.2.2 Objectives

- Forest-wide and management area objectives apply.

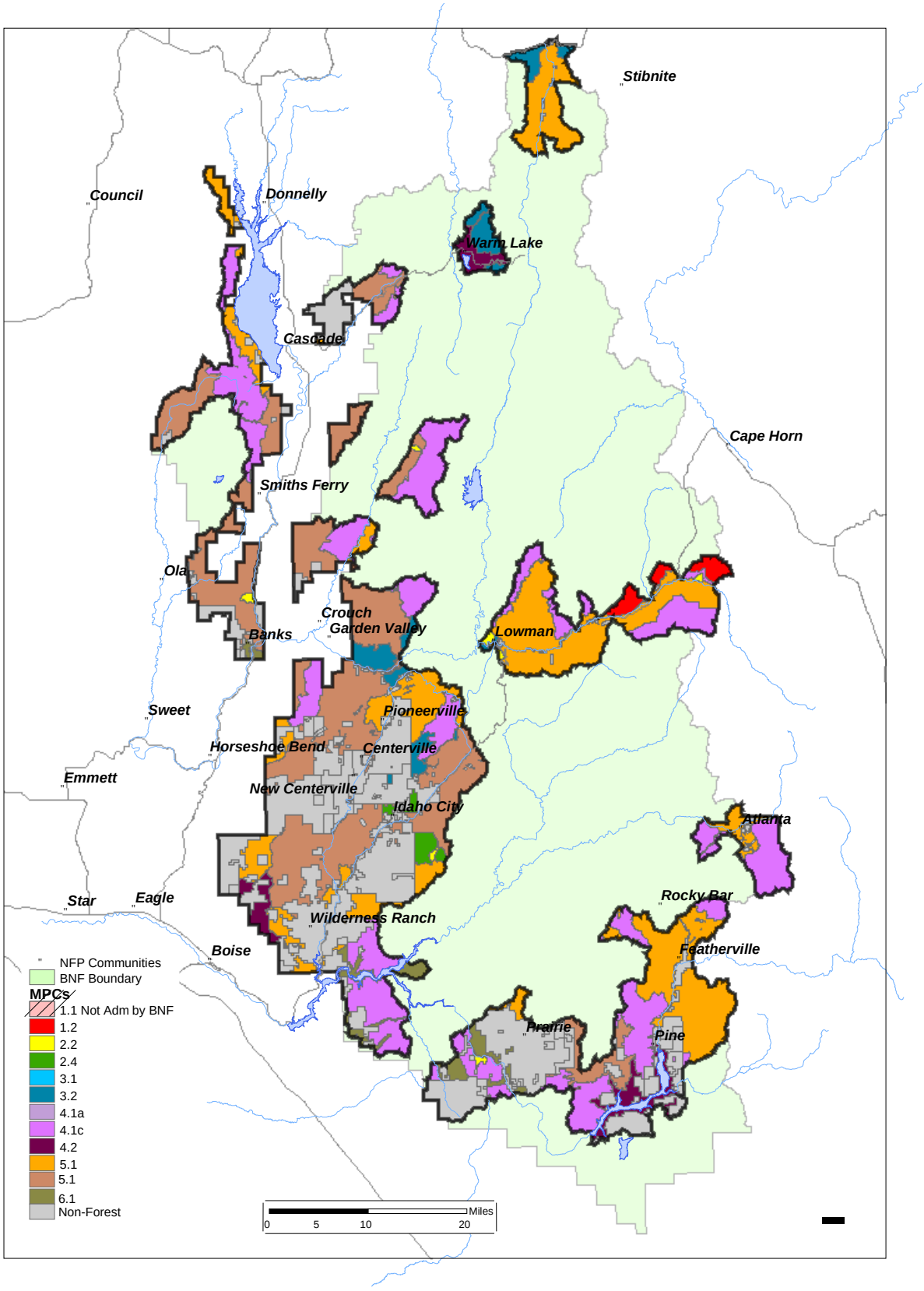
3.2.2.2.3 Guidelines

- Forest-wide guidelines apply.

3.2.2.2.3 Goals

- Forest-wide goals apply.

3.2.2.2.4 Management Prescription Categories for FMU 2



3.2.2.2.5 Management Area Direction

- Coordinate with local and tribal governments, agencies, and landowners in the development of County Wildfire Protection Plans that identify and prioritize hazardous fuels treatments within wildland-urban interface to reduce wildfire hazards.
- Coordinate and emphasize fire education and prevention programs with private landowners to help reduce wildfire hazards and risks. Work with landowners to increase defensible space around structures.
- Work with rural fire departments and Idaho Department of Lands to provide protection to local residents.
- Coordinate with Atlanta rural fire department for training and cooperation during wildland fire and prescribed fire events.
- Coordinate with adjacent land managers (e.g. Sawtooth and Payette National Forests, BLM, IDL, and county) to develop compatible wildland fire suppression strategies.

3.2.2.3 FMU 2 Characteristics

FMU 2 is made up of the subwatersheds that include towns, rural communities, or isolated residential developments along local highways and roads that cross the Forest (Table 6 and Table 7) and is the largest of the three FMUs at 1,006,200 acres. The majority of the wildland-urban interface communities within or adjacent to the Boise NF are those identified through the National Fire Plan by the State of Idaho as "communities of concern". In addition, areas that meet the definition of WUI in the 2010 LRMP FEIS, Volume 1, page 277 were also included. These are primarily subdivisions and other isolated residential structures not within defined city limits. Within FMU 2 there are several tracts of special-use summer home sites on NFS lands that are permitted by a unique set of regulations that affect the implement of FIREWISE practices.

The fire environment and fire management situation on the Boise NF is shaped by a variety of factors, including unique weather patterns, topographic influences, fuels conditions, and organizational status. FMU 2 contains a growing WUI, mostly within lower elevation warmer, drier vegetation types where ignitions have potential to grow rapidly.

Table 6—Interface, Communities, and Drainages for Idaho City and Mountain Home Ranger Districts

	Interface Communities	Intermix Communities	Drainage
Idaho City RD	Placerville, Centerville, and New Centerville.	Star Ranch, Quartzburg, and Pioneerville.	Grimes Creek (flows northeast to southwest)
	Idaho City	Highway 21 Intermix communities north and south of Idaho City, including Osprey and Valley of the Pines.	Mores Creek (flows northeast to southwest)
	Atlanta	Outlying residential homes in Montezuma and Quartz Creek.	Upper Middle Fork Boise River (flows east to west)

Mountain Home RD	Highway 21 Corridor	Intermix communities along Highway 21 including Clear Creek, Mores Rim Ranch, Wilderness Ranch, and Robie Creek subdivisions.	Mores Creek (flows northeast to southwest)
	Bogus Basin	Improvements and developments at Bogus Basin Mountain Resort.	
	Featherville and Pine	Intermix communities between Featherville and Pine, including Paradise, Green Ranch, and McGuire subdivisions.	South Fork Boise River (flows north to south)
	Fall Creek	Improvements in Fall Creek and developments in Anderson Dam Ranch.	South Fork Boise River(flows north to south)
	Prairie	Developments along Blacks Creek Road.	South Fork Boise River (flows southeast to northwest)

Table 7—Interface, Communities, and Drainages for Cascade, Lowman and Emmett Ranger Districts

	Interface Communities	Intermix Communities	Drainage
Cascade RD	Yellow Pine	Intermix and special use areas in Lower Johnson Creek	Lower Johnson Creek (flows south to north)
	Warm Lake	Special-use areas adjacent to Warm lake and along FR579 to the Landmark Guard Station	Warm Lake (in the South Fork Salmon River drainage—flows south to north) Landmark (in the Upper John Creek drainage—flows south to north)
		Improvements and developments in the Big Creek drainage	North Fork Payette River drainage (specifically Big Creek, which flows north to south)
	West side of the Cascade Reservoir and the various communities and developments therein		Cascade Reservoir/North Fork Payette River
Lowman RD	Lowman	Intermix community of Lowman. Includes various sub-divisions along Highway 21 from Clear Creek to Grandjean	Upper South Fork Payette River (flows from east to west)
Emmett RD		Upper portion of Squaw Creek, which includes scattered small improvements and developments just to the north of Third Fork Squaw Creek.	Squaw Creek (flows from north to south)
		High Valley intermix and including Banks to the south	Sage Hen Reservoir (specifically the Little Squaw Creek lower portion of the North Fork Payette--flows north to south)
	Garden Valley, Crouch	Intermix communities above Crouch along the Middle Fork Road (various subdivisions).	Lower Middle Fork and Lower South Fork of the Payette River (flowing from north to south and east to west, respectively)
	Silver Creek plunge community and recreational development		Upper Middle Fork Payette River (flowing north to south)

3.2.2.3.1 Safety

Take actions to mitigate firefighter and public injuries and loss of life, and damage to communities from severe, unplanned, and unwanted wildland fires by prioritizing firefighter, public, and community safety above other concerns in fire management activities. Every wildland fire is actively suppressed where necessary to protect life, investments, and valuable resources.

Only qualified personnel who promote safe and skillful application of fire management strategies and techniques will carry out fire management operations.

Fire management operations will not be initiated until all personnel on the fireline receive a safety briefing describing known hazards and mitigating actions, current fire season conditions, and current and expected fire weather and behavior.

3.2.2.3.2 Physical

FMU 2 is the lowest elevation FMU on the Forest and the actual fire season for this area is generally the same as the Forest-wide season.

This FMU has the greatest amount of area in the historically nonlethal fire regimes compared to the other FMUs on the Forest. In addition, many of the wildland-urban interface communities, ancillary utility and transportation corridors occur within or immediately adjacent to this fire regime.

Historical Fire Regime[1]	**Percent of FMU**
Forested Communities	
I (nonlethal)	44
III (mixed1 to mixed2)	29
IV (mixed2 to lethal)	4
V (lethal)	0
Non-Forested Communities	
II (mixed2)	23

3.2.2.3.3 Biological

- The dominant fuel conditions found in FMU 1 likely to affect fire behavior are described below:
    - Ponderosa pine types typically dominate southerly aspects at lower elevations ranging from valley bottoms to mid-elevations characterized as warm and dry conditions. Associated understory fuels range from light grasses and sedges, herbs, and shrubs with varying levels of conifer regeneration. Fire Behavior Prediction System (FBPS) Fuel Model 2 and 9 is representative of these areas. At the lower elevations of the ponderosa pine range, the north aspects are still dominated by ponderosa pine, though of higher stand density with increased levels of understory vegetation. At the higher elevation range, Douglas-fir becomes co-dominant or dominant within these stands.

National Fire Danger Rating System (NFDRS) Fuel Model C is representative of these stands.

- In the cooler wetter conditions associated with north slopes or higher elevations, Douglas-fir and true firs begin to dominate the landscape. As the elevations increase, the vegetation transitions to subalpine fir. Ponderosa pine types may still exist at lower elevations, but is a minor component of the stand makeup. Southerly aspects may be relatively open if moisture limited, but north slopes will be heavily forested with well-developed understory shrubs and multi-storied conifer development. Understory fuels range from relatively open surface fuels to dense shrubs and heavy concentrations of dead and down material. FBPS Fuel Models 8 and 10 are representative of these stands, though FM 5 is likely more representative in the stands dominated with understory shrubs. NFDRS Fuel Model G is representative of these stands.
- Lodgepole pine will typically dominate cold frost pockets, more prevalent at mid to higher elevations throughout the Forest. Depending on the age of the lodgepole stands, the associated fuels may be relatively light to dense shrubs with concentrations of dead and down material and emerging conifer regeneration. FBPS Fuel Models 8 and 10 are representative of these stands. NFDRS Fuel Model G is representative of these stands.

3.2.2.3.4 Resources

FMU 2 contains a high proportion of intermingled land ownership many with residential structures. There are several special-use authorizations for utility corridors associated with the developed areas. Large urban developments on private lands near the Forest boundary depend heavily on these utility corridors for electricity, telephone, and natural gas. Some of the subwatersheds in this FMU contain municipal water supplies. However, in some cases, subwatersheds containing municipal water supplies may also occur adjacent to this FMU. Several communication sites are located within this FMU. The Boise Basin Experimental Forest also occurs within this FMU due to the adjacency of Idaho City and surrounding subdivisions. Portions of primary road systems and highways important to rural and urban commerce pass fall within this FMU.

In addition to containing communities and rural development, FMU 2 supports a wide range of human uses. Much of this FMU is in close proximity to the Treasure Valley and has many developed and dispersed recreation sites that attract hunting, fishing, hiking, off-road vehicle use, snowmobiling, mountain biking, boating, rafting, skiing, and camping. The Bogus Basin Ski Resort is located within this FMU. Special-use permits are issued for the Ten Mile, Paradise Valley, Warm Lake, Long Creek, Camp Creek, Bear Creek, and Wapiti Creek summer residence tracts.

3.2.2.4 FMU 2 Fire Environment

FMU 2 has highly variable terrain, ranging from deep, steep-walled canyons in the valley bottoms to highly channeled midslope subwatersheds and relatively flat benches and ridges. The elevation ranges from 3,000 feet in the valley bottoms to 8,500 feet on the highest peaks. This FMU lies within portions of Ada, Elmore, Boise, Gem, and Valley Counties.

The landscape encompassed by FMU 2 is diverse, ranging from steep rolling foothills at the lower elevations covered by sagebrush and grass communities, gradually transitioning to highly productive forested areas at mid-elevations.

FMU 2 is dominated by the following main river drainages: Mores Creek, South Fork Boise River, South Fork Payette River, Middle Fork Payette River, South Fork Salmon River, and Johnson Creek. These river drainages influence fire behavior across the general area largely due to the similar alignment of the river drainages with the prevailing wind direction for southwest Idaho. Many fire starts that became large wildland fires within these river canyons exhibit very high to extreme rates of spread, especially during drought years and when Haines indices are high. Winds, channeled by the alignment of the river drainages dictate the direction of spread.

Access by road is generally good in this FMU. Therefore, appropriate initial attack, adjusted daily by response level, includes engines, crews, helicopters, and fire investigation. Air tankers may be dispatched upon request of the incident commander (IC) or duty officer.

3.2.2.4.1 Historical Fire Occurrence 2004-2013

Approximately 586 wildland fires have originated in FMU 2 since 2004 (Figure 7) representing 47 percent of the total fires on the Boise NF. Thirty-two percent of the fires are human-caused and 68 percent are caused by lightning. The number of human-caused fires is highest in this FMU compared to the other two. About 261,270 acres have burned since 2003 representing 34 percent of all the acres burned on the Forest.

The most number of fires started in August followed closely by July (Figure 8). August also accounts for the most acres burned (Figure 9). More than three-quarters of the fires in this FMU occur between 4,000 and 6,000 feet (Figure 10), though the greatest number of acres burned has been lower at 4,000 feet (Figure 10). About 38 percent of the fire starts in this FMU have been at elevations below 5,000 feet. This is much greater than the number of starts in the other two FMU's. In FMU 3, about 13 percent of the fire starts occur at elevations below 5,000 feet while in FMU1, only 3 percent occur below 5,000 feet.

Figure 8—Total Number of Fires in FMU 2 from 2004 through 2013 by Month

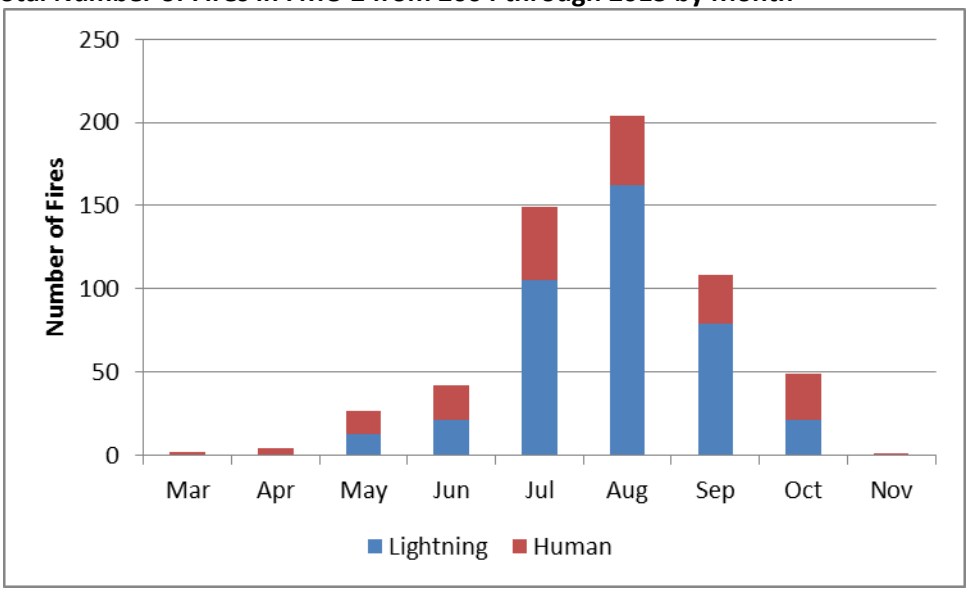


Figure 9—Total Acres Burned in FMU 2 from 2004 through 2013 by Month

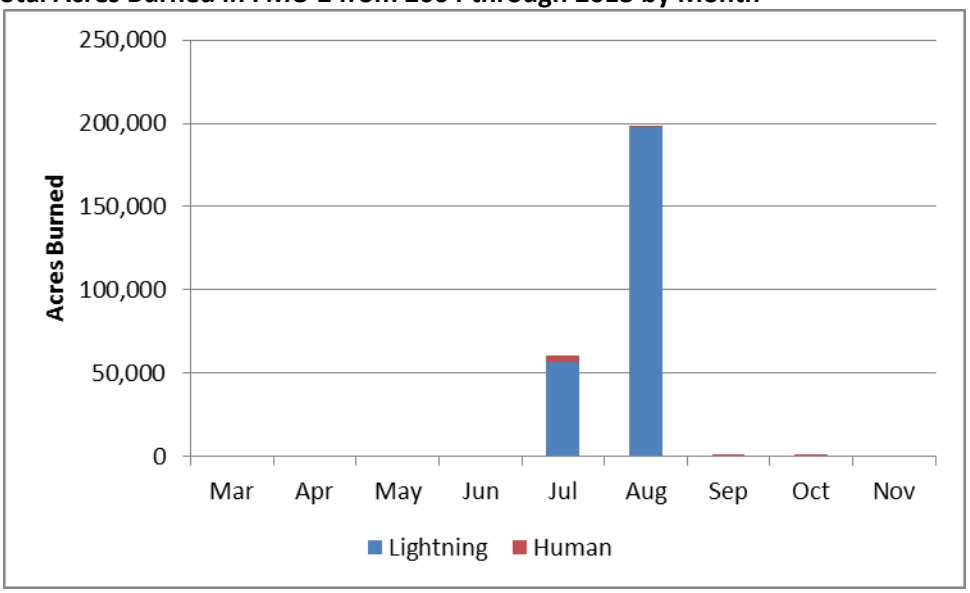
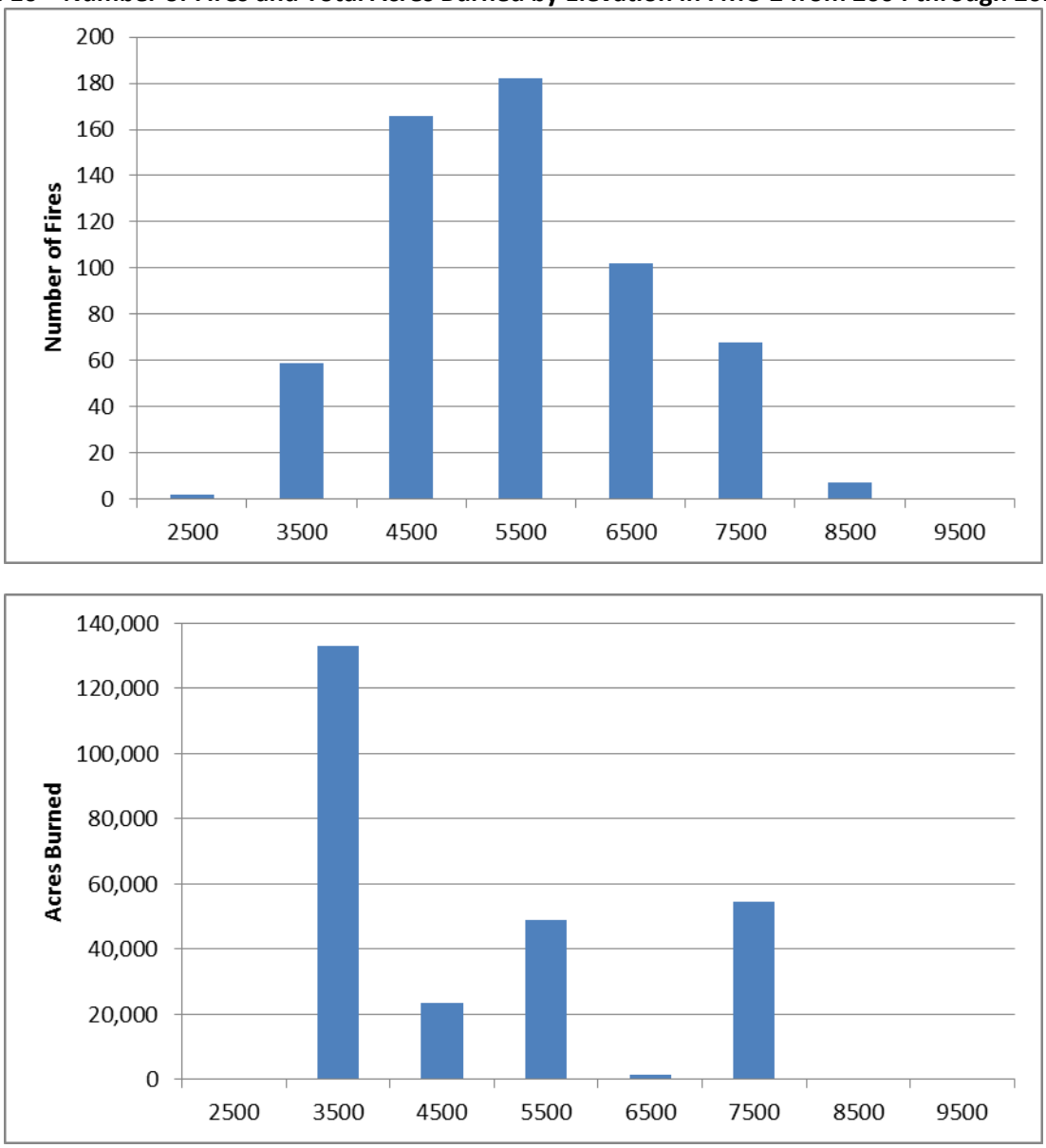


Figure 10—Number of Fires and Total Acres Burned by Elevation in FMU 2 from 2004 through 2013



3.2.2.4.2 Fire Behavior

Fire behavior is affected by aspect changes, which influence vegetative types and cover. In general, the fuel models that most closely represent predicted fire behavior for this FMU are Northern Forest Fire Laboratory (NFFL) fuel models 2 (grass model), 5 (2-foot brush), 8 (short needle timber litter), 9 (long needle timber litter), and 10 (short needle timber litter and downed timber). Rates of spread and flame lengths within each fuel model are dependent on age class of the fuel, dead to live ratio, and live fuel moisture.

3.2.2.4.3 Weather

- West winds averaging 3 to 4 mph, average low relative humidity of 15 percent and average high relative humidity of 58 percent are prevalent in June. The southeastern part of the FMU has an average low relative humidity of 6 percent and an average high of 44 percent and the winds are southwest 9 to 10 mph.
- Fire behavior begins to subside in late September and October due to shorter days, decreasing temperatures, higher relative humidity, less wind, moisture from the Pacific Ocean, and monsoons moving farther north.
- Dry lightning is most prevalent from mid-July to mid-September due to only the upper edges of the southwest monsoons reaching the Forest.
- Dry and mild conditions may occur in late October (sometimes referred to as an Indian summer) leading to a period of increased fire behavior potential before the onset of winter. During this time of cooler temperatures in the mornings and nights, there is often an increase in human-caused fires, usually warming fires left by hunters.
- This FMU is lower in elevation than FMU1 and receives between 20 to 40 inches of precipitation in a year.

3.2.3 FMU 3

3.2.3.1 FMU 3 Snap Shot

- FMU Number: 3
- Fire Behavior Indicator: Energy Release Component(ERC), Burning Index (BI)
- Nearest Weather Station: Pine Creek, Town Creek and Bearskin RAWS
- Acres/Agency: 973,260 acres—primarily BOF protection, with some BLM in the very southern portion of the FMU.
- Predominant Vegetation Types: This FMU contains close to 30% each of the ponderosa pine types; cool, dry and cool, moist Douglas-fir and true firs; and non-forested shrub types. There is also about 10% subalpine fir and lodgepole pine types.
- IA Dispatch Office: Boise Interagency Dispatch Center
- Communities adjacent or within the FMU: FMU 3 abuts FMU 2 (WUI) in some areas and therefore is in close proximity to several of the WUI areas described for FMU 2.
- LRMP options available for response to ignition: Unplanned ignitions are managed for protection objectives. This FMU comprises the "middle ground" portion of the Forest—generally separating the FMU 2 from FMU 1 (where wildfire can be managed for multiple objectives including resource objectives). FMU 2 requires a management response with protection being the objective, however, the full range of strategies and tactics can be applied to manage wildfires.

3.2.3.2 FMU 3 Guidance

FMU 3 is the area managed for general forest management goals. Goals and objectives for this FMU are the most diverse because of the wide range of MPCs assigned.

The total FMU area is made up of the following 2010 LRMP Management Areas: BNF01 (12 percent), BNF02 (12 percent), BNF03 (10 percent), BNF05 (4 percent), BNF06 (1 percent), BNF07 (13 percent), BNF10 (1 percent), BNF11 (4 percent), BNF13 (7 percent), BNF14 (7 percent), BNF15 (4 percent), BNF16 (6 percent), BNF17 (2 percent, BNF18 (3 percent), BNF19 (8 percent), and BNF20 (5 percent). Table 8 and section 3.2.3.2.5 display the MPCs within this FMU.

Table 8--Management Prescription Categories Assigned to the FMU

MPC	FMU 3
2.2	<1
3.1	3
3.2	17
4.1a	3
4.1c	31
5.1	39
6.1	5

The 2010 LRMP provides the following direction applicable to FMU 3:

- While wildland fire use is not an approved management option in this FMU based on the LRMP, a full range of suppression responses is available from intensive management actions to monitoring.

3.2.3.2.1 Desired Conditions

- Forest-wide desired conditions apply

3.2.3.2.2 Objectives

- Forest -wide objectives apply

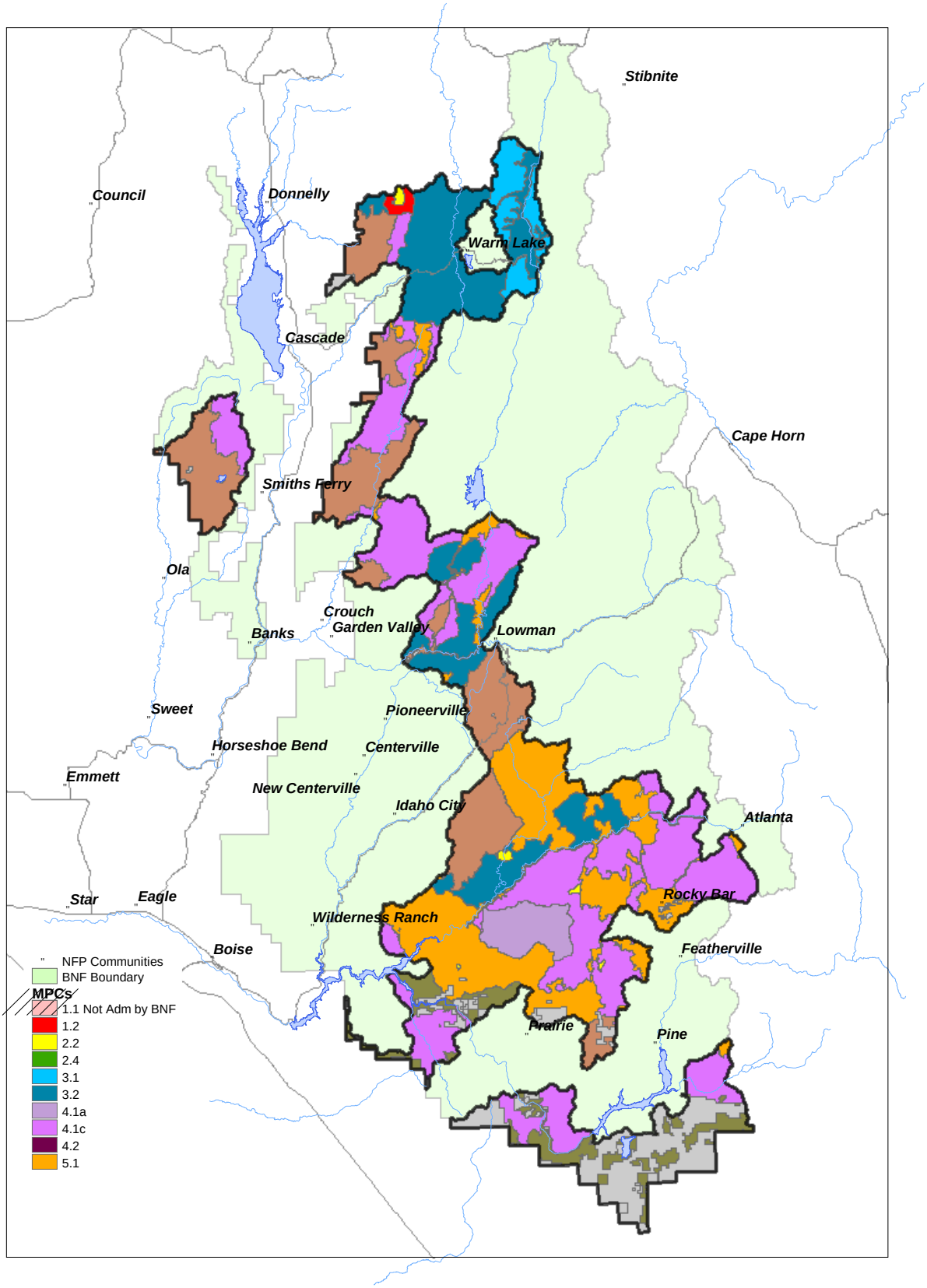
3.2.3.2.3 Guidelines

- Forest-wide guidelines apply

3.2.3.2.4 Goals

- Forest –wide goals apply

3.2.3.2.5 Management Prescription Categories for FMU 3



3.2.3.2.6 Management Area Direction

- Use prescribed fire as appropriate in burned areas (within 1994 Rabbit Creek Fire) as vegetation recovers from disturbance. Identify and implement maintenance underburns within areas that experienced low intensity wildfire in 1994.
- Use prescribed fire and mechanical treatments to reduce fuel loadings and to protect investments along Highway 21 corridors and the lower Rock Creek area. Emphasize prescribed fire in the vegetative groups that support ponderosa pine from Julie Creek north to Scott Creek, and the west side of Deadwood Reservoir.
- Use a combination of mechanical and prescribed fire treatments to reduce fuel loadings adjacent to Forest Service administrative sites such as Landmark to reduce wildfire hazards.
- Limit the use of prescribed fire in existing and newly established stands of mountain big sagebrush and bitterbrush within the 1992 Foothills Fire area in order to restore canopy closure, and restore or maintain shrub diversity.
- Evaluate opportunities to demonstrate and teach techniques in fire ecology within the Cottonwood Demonstration Area set aside in the 1995 Record of Decision for the Boise River Wildfire Recovery Project. As part of this evaluation, determine the need to maintain the special status of the area and define area uses expected in the future.
- Coordinate with adjacent land managers (BLM, State of Idaho, Payette NF) to develop compatible wildland fire suppression strategies.

3.2.3.3 FMU Characteristics

This FMU generally runs north to south between FMU 1 and FMU 2. The southernmost portion of the FMU contains a high proportion of intermingled ownerships. This FMU is slightly smaller than FMU 2 at 973,260 acres.

The fire environment and fire management situation on the Boise NF is shaped by a variety of factors, including unique weather patterns, topographic influences, fuels conditions, and organizational status. FMU 3 is an area where several large fires have burned during the past two decades.

FMU 3 has a moderate occurrence of human-caused fires, typically from recreational activities such as camping and hunting. The majority of the fire starts in this FMU are lightning-caused.

3.2.3.3.1 Safety

All fire management activities will consider the safety of personnel and the public as the highest priority.

Only qualified personnel who promote safe and skillful application of fire management strategies and techniques will carry out fire management operations.

Fire management operations will not be initiated until all personnel on the fireline involved receive a safety briefing describing known hazards and mitigating actions, current fire season conditions, and current and expected fire weather and behavior.

3.2.3.3.2 Physical

Elevations range from 3,000 feet in lower valleys to 9,000 feet at the higher points, such as Trinity Peak and Bald Mountain. The FMU 3 has highly variable terrain, ranging from deep steep-walled canyons in the river gorges to highly channeled mid-slope subwatershed and relatively flat benches and ridges.

FMU 3 is a combination of low to high elevations so the actual fire season for this area is generally June 15 through October 31.

This FMU has about equal amounts of the lower to mid-elevation fire regimes (nonlethal and mixed1/mixed2). The higher elevation mixed2/lethal fire regimes are less common. Most of the non-forested communities occur in the southern portion of the FMU. Northern portions shift to the forested fire regimes (III).

Historical Fire Regime[1]	Percent of FMU 3
Forested Communities	
I (nonlethal)	28
III (mixed1 to mixed2)	34
IV (mixed2 to lethal)	9
V (lethal)	0
Non-Forested Communities	
II (mixed2)	29

3.2.3.3.3 Biological

The vegetation is comprised of ponderosa pine and Douglas-fir communities in valley bottoms and mid-slope elevations, and gradually transitions to cool, moist Douglas-fir and subalpine fir vegetation types at higher elevations. There is a small amount of sagebrush and grass communities at the lower elevation southernmost areas of the Forest. However, this is not a prevalent fuel type throughout the rest of the FMU. Pockets of lodgepole pine coexist on north slope frost pockets, and isolated pockets of aspen are intermingled with forest vegetation at all elevations.

The dominant fuel conditions found in FMU 3 likely to affect fire behavior are described below:

- Sagebrush and grass typically dominates the area to the south of the South Fork Boise River. NFDRS Fuel Model T is representative of these areas.
- Ponderosa pine habitats typically dominate southerly aspects at lower elevations ranging from valley bottoms to mid-elevations characterized as warm and dry conditions. Associated understory fuels range from light grasses and sedges, herbs, and shrubs with varying levels of conifer regeneration. FBPS Fuel Model 2 and 9 is representative of these areas. At the lower elevations of the ponderosa pine range, the north aspects are still dominated by ponderosa pine, though of higher stand density with increased levels of understory vegetation. At the higher elevation range, Douglas-fir emerges as a stand co-dominant or begins to show dominance of the stands. NFDRS Fuel Model C is representative of these stands.

- In the cooler, wetter conditions associated with north slopes or higher elevations, Douglas-fir and true firs begin to dominate the landscape. As the elevations increase, the vegetation transitions to subalpine fir. Ponderosa pine may still exist at lower elevations, but is a minor component of the stand makeup. Southerly aspects may be relatively open if moisture-limited, but north slopes will be heavily forested with well-developed understory shrub and multi-storied conifer development. Understory fuels range from relatively open surface fuels to dense shrub and heavy concentrations of dead and down material. FBPS Fuel Models 8 and 10 are representative of these stands, though FM 5 is likely more representative in the stands dominated with understory shrubs. NFDRS Fuel Model G is representative of these stands.

3.2.3.3.4 Resources

This FMU supports a wide variety of human uses. There are extensive developed recreation areas throughout this zone. Recreational activities provide for both motorized and non-motorized opportunities and primarily include hunting, fishing, hiking, backpacking, rafting, ATV riding, snowmobiling, and camping.

3.2.3.4 FMU Fire Environment

The northern portion of FMU 3 is dominated by the South Fork Salmon River, the Middle Fork Payette River, and the Deadwood River the latter two flowing into the South Fork Payette River. All three of these drainages are significantly affected by lightning during the fire season and, with the exception of the South Fork Salmon River, have not been significantly affected by the large lethal fires that occurred on the Forest in 2006 and 2007. These steep river canyons combined with changes in surface heating and wind patterns create conditions that can generate high rates of spread and extreme flame lengths not only in the major drainages, but also in the tributary watersheds.

The southern portion of FMU 3 lies primarily within subwatersheds that flow into the Middle Fork Boise River drainage. Incised river canyons and steep side-slopes ranging from 3,000 feet in the canyon bottoms to 9,000 feet at various mountain peaks characterize this area. The three main river canyons influence fire behavior across the general area largely due to the similar alignment of the river drainages with the prevailing wind direction for southwest Idaho.

Many of the wildland fire starts that became large fires within the river canyons exhibited very high to extreme rates of spread as winds, channeled by the alignment of the river drainages caused an easterly spread over successive burning periods. During the past two decades, high Haines indices in combination with hot and dry weather conditions have produced plume-dominated fires throughout this FMU.

There is a mix of access opportunities in this FMU. There are some roads, but they are primarily in the river bottoms and therefore the majority of access in these canyons is limited to aerial attack. Initial attack has been successful for the most part due to prompt detection and quick initial attack response.

3.2.3.4.1 Historical Fire Occurrence 2004-2013

Approximately 421 wildland fires have originated in FMU 3 since 2004 (Figure 11) representing 33 percent of the total fires on the Boise NF. Thirteen percent of the fires in this FMU are human-caused and 87 percent are caused by lightning. The number of human-caused fires is intermediate to the other FMUs on the Forest. About 226,500 acres have burned since 2004 which is about 29 percent of the total acres affected by wildfire on the Forest.

The most number of fires occurred in August (Figure 12). Prior to 2013 one fire that started in July had accounted for most of the acres burned in this FMU (North Fork fire in 2007). However the 2012 Fire, which started in August, burned more than three times as many acres as this fire. The range of fire starts is greater than FMU 1 but fewer fires occur at lower elevations than FMU 2 (

Figure 13).

Figure 11—Total Number of Fires in FMU 3 from 2004 through 2013 by Month

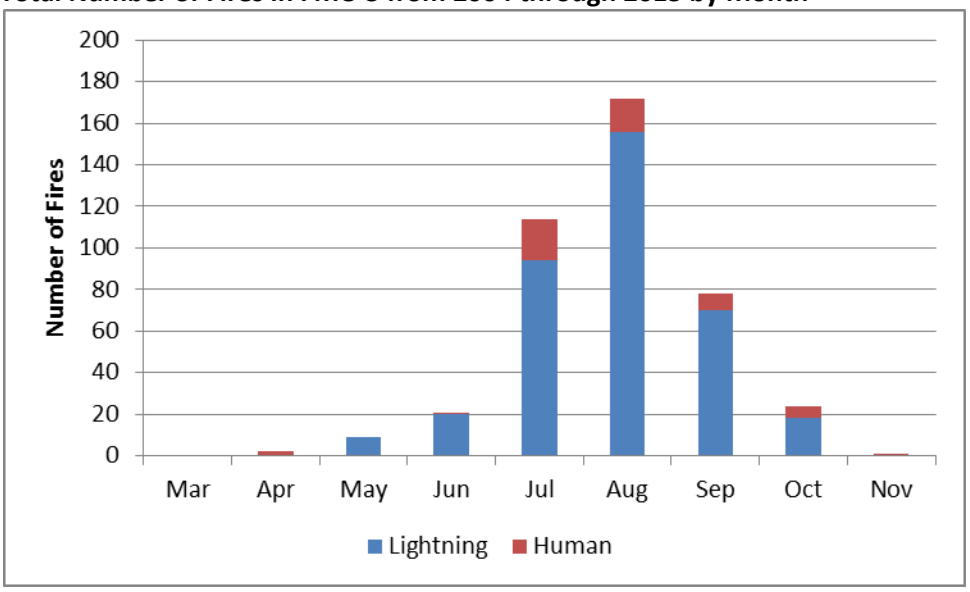


Figure 12—Total Acres Burned in FMU 3 from 2004 through 2013 by Month

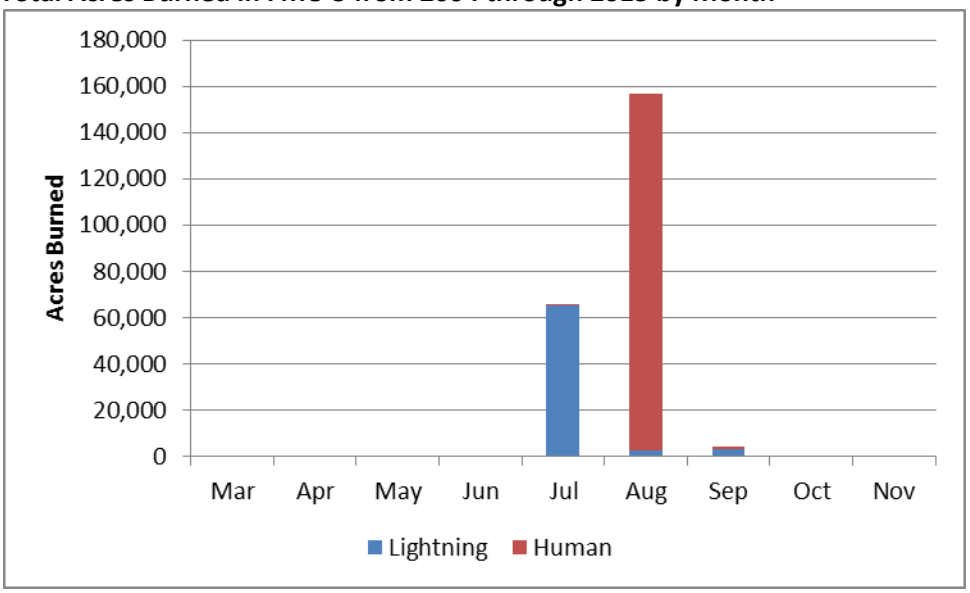
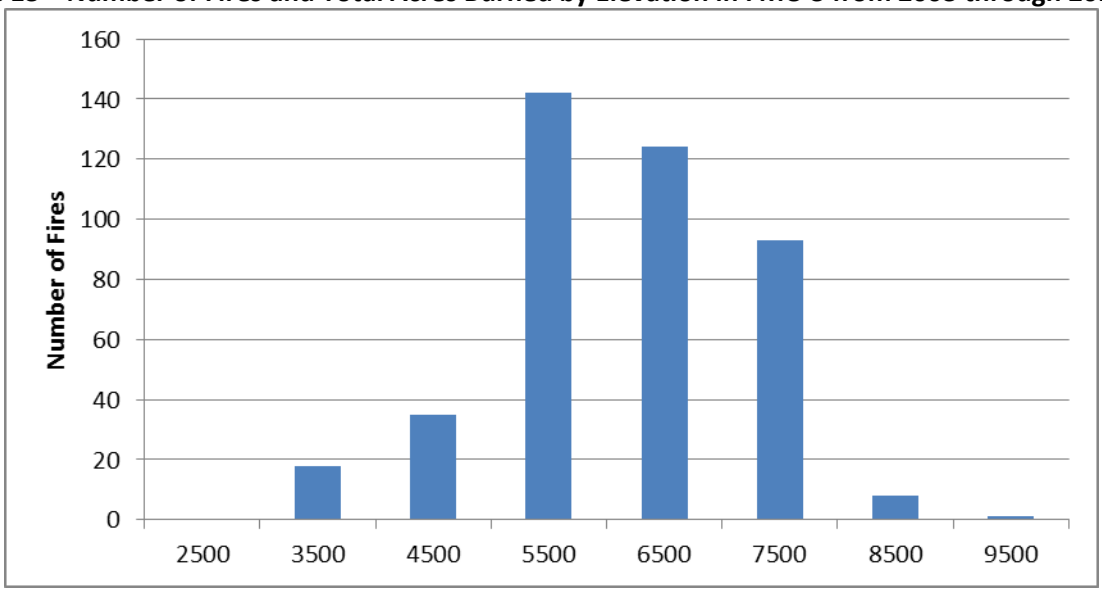
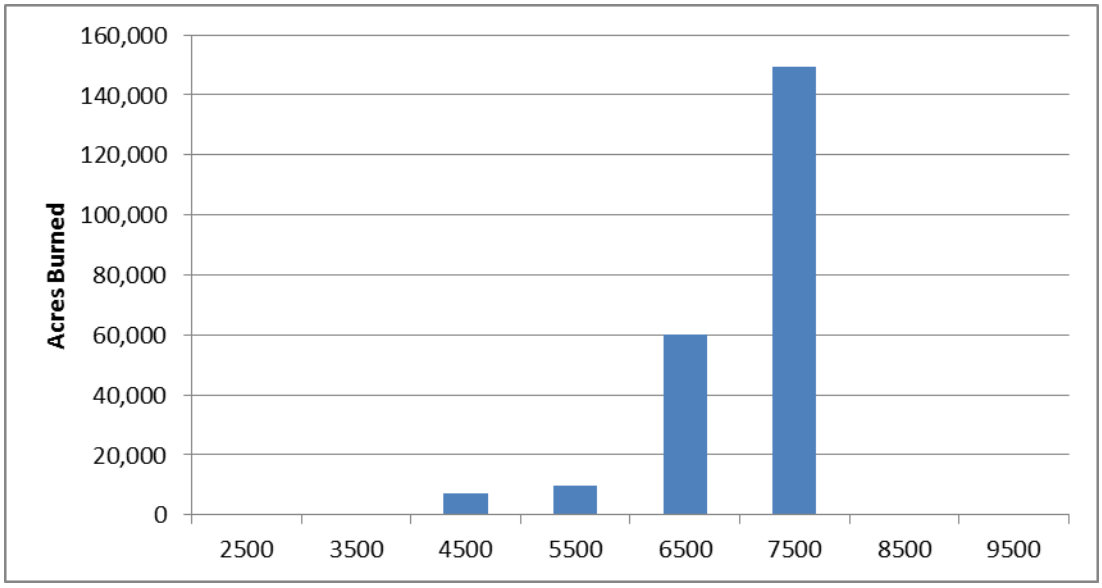


Figure 13—Number of Fires and Total Acres Burned by Elevation in FMU 3 from 2003 through 2012





3.2.3.1.2 Fire Behavior

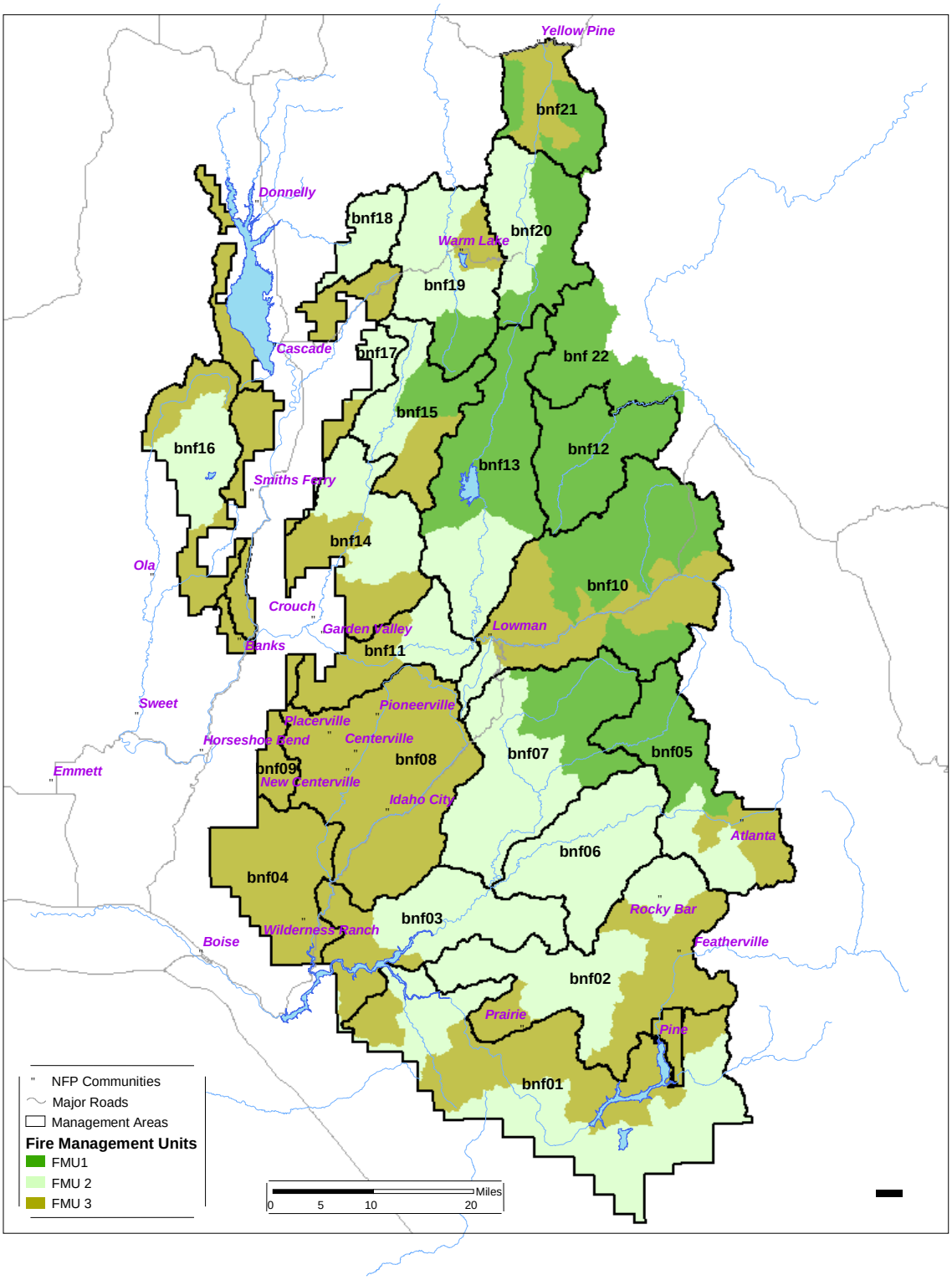
Fire behavior is affected by aspect changes, which influence vegetative types and cover. In general, the fuel models that most closely represent predicted fire behavior for this FMU are Northern Forest Fire Laboratory (NFFL) fuel models 2 (grass model), 5 (2-foot brush), 8 (short needle timber litter), 9 (long needle timber litter), and 10 (short needle timber litter and downed timber). Rates of spread and flame lengths within each fuel model are dependent on age class of the fuel, dead to live ratio, and live fuel moisture.

3.2.3.1.3 Weather

- West winds averaging 4 to 5 mph, average low relative humidity of 12 percent and average high relative humidity of 57 percent are prevalent in June.
- Hot, dry, and unstable conditions usually occur from mid-July through August, leading to the potential for plume-dominated fire behavior.
- Dry lightning is most prevalent from mid-July to mid-September due to only the upper edges of the southwest monsoons reaching the Forest.
- Dry and mild conditions may occur in late October (sometimes referred to as an Indian summer), leading to a period of increased fire behavior potential before the onset of winter conditions. During this time of cooler temperatures in the mornings and nights, there is an increase of human-caused fires. These are usually warming fires left by hunters. This FMU is lower in elevation than FMU 1 and receives between 30 to 40 inches of precipitation in a year.

Appendix A: Management Area Snapshots

Figure 14—Fire Management Units and Boise National Forest Management Areas



Management Area 01-Lower South Fork Boise River

Ownership – This management area is administered by the Mountain Home Ranger District and lies in Elmore. The MA is an estimated 291,100 acres, of which the Forest Service manages 59 %, 31 % are privately owned, and 10 % are State of Idaho lands. The area is bordered by Boise National Forest to the north, Sawtooth National Forest to the east, and a mix of private and BLM lands to the south and west.

FMUs - Forty-four percent of the MA is in the FMU 2 and 56 % is in the FMU 3.

RNAs and Wild and Scenic Rivers - One eligible Wild and Scenic River, the South Fork Boise River, falls within this management area. The Raspberry Gulch RNA is located in this MA.

Air Quality - Portions of this management area lie within Montana/Idaho Airsheds ID-21, 22, and 24. There are ambient air monitors located within these airsheds in Boise, Idaho City, and Mountain Home. The Sawtooth Wilderness is the closest Class I area.

SWRA Resources - Eleven of the 24 subwatersheds are listed as impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Little Canyon Creek, Big Fiddler-Soup, Long Gulch, Black Canyon-Trail, Pierce-Mennecke, Cayuse-Rough, Anderson Ranch Reservoir, Lower Willow, Upper Willow, Indian Creek, and Wood Creek. There is one TMDL-assigned subwatershed associated with this management area; Indian Creek.

Anadromous fish species no longer exist within the MA. Bull trout are known to mostly occur within the South Fork Boise River.

Botanical Resources - TEPCS plants known to occur in the MA are:
Bugleg goldenweed, Region 4 sensitive; Wilcox's primrose, proposed Region 4 sensitive; hooked stylocline, proposed Region 4 sensitive; slender moonwort, Candidate for federal listing

Non-native Plants – Non-native plants known to occur in this MA are:
Leafy spurge; spotted knapweed; rush skeletonweed; Dalmatian toadflax; Scotch thistle

An estimated 73 % of the area is highly susceptible to invasion by noxious weed and exotic plant species. The main weeds of concern are leafy spurge and spotted knapweed, which currently occur in small, scattered populations throughout the area.

Recreational Resources - Relatively low elevation and proximity to Mountain Home and Boise make this area a year-round recreation destination. There are many developed recreation sites primarily around Anderson Ranch Reservoir area.

Cultural Resources - This management area contains the highest density of prehistoric cultural resource sites known on the Forest.

Rangeland Resources - The management area contains all or portions of nine cattle allotments. This area contains a fairly high level of structural range improvements.

Special Uses - Special use authorizations include a designated utility corridor containing the Anderson Ranch-Mountain Home power transmission line, operations along Anderson Ranch Road, and utility corridors to private inholdings.

Management Area 02-Rattlesnake Creek/Feather River

Ownership – This management area is administered by the Mountain Home Ranger District and lies in Elmore County. The management area is an estimated 198,900 acres, of which 88 % are managed by the Forest Service, 10 % are privately owned, and 2 % are State of Idaho lands. The area is bordered by Boise National Forest to the south, west, and north, and Sawtooth National Forest to the east.

FMUs – Forty-three percent of the MA is in the WUI FMU and 57 % is in the FMU 3.

RNAs and Wild and Scenic Rivers - Two eligible Wild and Scenic Rivers fall within the management area, Elk Creek and the South Fork Boise River. Elk Creek has two segments in this management area with classifications of Scenic and Wild. The Elk Creek Enclosure and Trinity Mountain RNAs are located in this MA.

Air Quality – This management area lies within Montana/Idaho Airshed ID-21. There are ambient air monitors located within these airsheds in Boise, Idaho City, and Mountain Home. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - Seven of the 15 subwatersheds in this area have water bodies that were listed under Section 303(d) of the Clean Water Act. These are Lower Rattlesnake, Upper Rattlesnake, Lower Smith, Upper Smith, Feather River, Bear Creek, and Elk Creek. There are currently no TMDLs.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Bull trout occur in the Upper Rattlesnake Creek, Feather River, Bear Creek, Elk Creek, and Wagontown-Schoolhouse subwatersheds, with a strong local population found in the Elk Creek subwatershed. The Bear Creek and Elk Creek subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; giant helleborine orchid, Region 4 Sensitive; Kellogg's bitterroot, Region 4 proposed Sensitive; Wilcox's primrose, Region 4 proposed Watch; tall swamp onion, Boise National Forest, proposed Forest Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Rush skeletonweed; spotted knapweed; leafy spurge; Dalmatian toadflax

An estimated 49 % of the area is highly susceptible to invasion by noxious weed and exotic plant species. The main weeds of concern are rush skeletonweed and leafy spurge, which currently occur in scattered populations throughout the management area.

Recreation Resources – Most of the recreation in this MA is dispersed.

Cultural Resources - This management area contains the South Boise Historic Mining District, which is listed on the National Register of Historic Places. Historic properties associated with logging and homesteading are also located in the area.

Rangeland Resources - The management area contains all or portions of seven cattle and two sheep allotments.

Lands and Special Uses - There are several utility corridors to private inholdings and communities.

Management Area 03-Arrowrock Reservoir

Ownership – This MA is administered by the Mountain Home and Idaho City Ranger Districts and lies in Elmore and Boise Counties. The MA is an estimated 117,600 acres, of which the Forest Service manages 88 %, 10 % are privately owned, and 2 % are State of Idaho lands. The area is bordered primarily by Boise National Forest, with some State lands.

FMUs – Twenty-six percent of this MA is in the FMU 2 and 74 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – Two eligible Wild and Scenic Rivers fall within the management area, the Middle Fork Boise River and the North Fork Boise River. The portion of the Middle Fork Boise River in the area has a Recreational classification. There are no RNAs in this MA.

Air Quality - This management area lies within Montana/Idaho Airshed ID-21. There are ambient air monitors located in Boise, Idaho City, and Mountain Home. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Deer-Grouse and Sheep-Charcoal subwatersheds are part of the state-regulated public water systems (United Water of Idaho, Inc.) for portions of the city of Boise.

Only one of the 11 subwatersheds in this area was listed in 2000 as having an impaired water body under Section 303(d) of the Clean Water Act—the Blacks Creek subwatershed.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Threatened bull trout occur in many streams within the Upper Sheep Creek, Lambing-Trail, Badger-Slide, Logging-Haga, Deer-Grouse, and Lower Sheep subwatersheds. A strong local population of bull trout occurs in upper Sheep Creek.

Botanical Resources – TECPS plants known to occur in the MA are:
Giant helleborine orchid, Region 4 Sensitive; Kellogg's bitterroot, proposed Sensitive; Wilcox's primrose, proposed Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Rush skeletonweed; spotted knapweed; Dalmatian toadflax; leafy spurge; St. Johnswort

An estimated 70 % of the area is highly susceptible to invasion by noxious weed and exotic plant species. The main weeds of concern are leafy spurge and spotted knapweed, which currently occur in small, scattered populations, particularly along the Middle Fork Boise River corridor.

Recreation Resources - Relatively low elevation, paved access, several major recreation attractions, and proximity to Boise and the Treasure Valley make this a year-round recreation area.

Rangeland Resources - The management area contains all or portions of seven cattle allotments and one sheep allotment.

Special Features - The Idaho State-designated Ponderosa Pine Scenic Byway (Highway 21) lies partly within this area. The William H. Pogue National Recreation Trail is in this area.

Lands and Special Uses - Special use permits are issued for several utility corridors to private inholdings.

Management Area 04-Boise Front/Bogus Basin

Ownership – This management area is administered by the Mountain Home and Idaho City Ranger Districts and lies in Boise and Ada. The management area is an estimated 93,000 acres, of which the Forest Service manages about 52 %, 44 % are privately owned, and 4 % are State of Idaho lands. The area is bordered by Boise National Forest to the north and east, and by a mix of BLM and private lands to the south and west.

FMUs – All of this management area is in the FMU 2.

RNAs and Wild and Scenic Rivers –There are no RNAs or Wild and Scenic Rivers in this MA.

Air Quality - Portions of this management area lie within Montana/Idaho Airshed ID-15, 21, 22. A portion of the former Northern Ada County PM and CO non-attainment area lies within the MA. While Northern Ada County is in attainment and has developed "Maintenance Plans" for PM 10 and CO, the area has experienced problems for ozone and PM 2.5. There are ambient air monitors located in Garden Valley, Idaho City as well as Boise and surrounding cities. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - Shafer Creek, Sheep-Charcoal, Voquelin-Deer, and Robie Creek subwatersheds are part of state-regulated public water systems (United Water of Idaho, Inc) for portions of the city of Boise, and (Bogus Basin Recreational Association) for Bogus Basin.

Two of the eleven subwatersheds in this MA were listed in 2000 as having impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Cottonwood Creek and Macks Creek. The Cottonwood Creek, Dry Creek, Miller-Hulls Gulch subwatersheds currently have assigned TMDLs.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Threatened bull trout are not currently known to occur in this area, although they are known to occur downstream in Lucky Peak Reservoir and within Mores Creek.

Botanical Resources – There are no TEPCS plants known to occur in the MA.

Non-native Plants – Non-native plants known to occur in this MA are:
rush skeletonweed; cheatgrass

An estimated 87 % of the management area is highly susceptible to invasion by noxious weeds and exotic species. A cooperative agreement between local counties and the Forest Service has been established for implementing a noxious weed control and prevention program.

Recreation Resources - Paved access, proximity to Boise and the Treasure Valley, and year-round recreational attractions combine to make this management area the most heavily used recreation area on the Forest.

Cultural Resources - This management area contains sites associated with American Indians, miners, and ranchers.

Rangeland Resources - The management area contains all or portions of two cattle allotments and one sheep allotment.

Lands and Special Uses - Special use authorizations in the area are issued for Shafer Butte, Deer Point/Doe Point, and Lower Deer Point communication sites, and several utility corridors to private inholdings.

Special Features - Management Area 4 contains the Bogus Basin Mountain Resort and the Shafer Butte Recreation Area, and a small portion of Lucky Peak Reservoir. Lucky Peak Nursery is located just off Forest Service land next to the reservoir. The Idaho State-designated Ponderosa Pine Scenic Byway (Highway 21) lies partly within this management area.

Management Area 05-Upper Boise River

Ownership - This management area is administered by the Idaho City Ranger District and lies in Boise and Elmore Counties. The management area is an estimated 119,800 acres, of which roughly 99 % are managed by the Forest Service, and 1 % are privately owned. Most of the private inholdings are centered around the historic mining town of Atlanta. The area is bordered by Boise National Forest to the west and north, Sawtooth National Forest to the south, and the Sawtooth Wilderness to the east.

FMUs – Twenty-three percent of the management area is in the FMU 2, 27 % is in the FMU 3, and 50 % is in the FMU 1.

RNAs and Wild and Scenic Rivers - Portions of three eligible Wild and Scenic Rivers fall within this management area, the Middle Fork Boise River and the North Fork Boise River. The Middle Fork Boise River has one segment in this management area with a classification of Recreational. There are no RNAs in this MA.

Air Quality - This management area lies within Montana/Idaho Airshed ID-21. There is an ambient air monitor located within the airshed in Idaho City. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Joe Daley-James subwatershed is part of a state-regulated public water system for the community of Atlanta.

There are no impaired water bodies listed under Section 303(d) of the Clean Water Act, nor are there currently any TMDL-assigned watersheds associated with this management area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Threatened Bull trout are found throughout the area, with strong local populations in the Bald Mountain-Eagle, Johnson Creek, Queens, and Little Queens River subwatersheds.

Botanical Resources – TECPS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; giant helleborine orchid, Region 4 Sensitive; Bryum moss, Region 4 Sensitive; Kellogg's bitterroot, proposed Region 4 Sensitive; Swamp onion, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Dalmatian toadflax; St. Johnswort; Whitetop; Canada thistle; yellow toadflax

An estimated 20 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. Dalmatian toadflax appears to be the main weed of concern within this management area.

Recreation Resources - Most of the management area has an undeveloped emphasis centered around dispersed recreation such as hunting, fishing, and dispersed camping. Many recreation users come from the Treasure Valley. This area has a number of trails that provide access into the popular Sawtooth Wilderness.

Cultural Resources - This management area contains the historic mining camps of Atlanta and Graham. A portion of Atlanta town site is listed on the National Register of Historic Places. Other National Register eligible properties in the area are associated with the dredge and lode mining that occurred until the mid 1950s.

Rangeland Resources - The management area contains portions of three sheep allotments.

Lands and Special Uses - The Kirby Hydroelectric Project Dam provides power for Atlanta. Montezuma Creek is the municipal water supply for Atlanta. There are numerous special use permits for utility corridors in the Atlanta area.

Management Area 06-Middle Fork Boise River

Ownership - This management area is administered by the Mountain Home and Idaho City Ranger Districts and lies in Elmore County. The management area is an estimated 105,800 acres, of which over 99 % are managed by the Forest Service, and less than 1 % is privately owned. Lands administered by the Boise National Forest surround the area.

FMUs – The entire management area is located in the FMU 3.

RNAs and Wild and Scenic Rivers - A portion of one eligible Wild and Scenic River, the Middle Fork Boise River, lies within the management area. The Middle Fork Boise River has one segment in this area with a Recreational classification. The Roaring River RNA occurs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-21. There is an ambient air monitor located within the airshed in Idaho City. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - Three of the seven subwatersheds in this area were listed in 2000 as having impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Big Five-Pool, Browns-Mink, and Granite-Buck. Currently there are no TMDLs for any of the listed subwatersheds.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Bull trout have been found in all of this area except for the Lost Man subwatershed. The Roaring River subwatershed has been identified as important to bull trout recovery, and as a high-priority area for restoration.

Botanical Resources – TEPCS plants known to occur in this MA are:
Idaho douglasia Region 4 Sensitive; giant helleborine orchid. Region 4 Sensitive; Kellogg's bitterroot, region 4 proposed Sensitive

Non-native plants – Non-natives known to occur in this MA are:
Dalmatian toadflax; rush skeletonweed; spotted knapweed; St. Johnswort

An estimated 57 % of the management area is highly susceptible to invasion by exotic species of concern and noxious weeds. Rush skeletonweed, Dalmatian toadflax, and spotted knapweed are the main weed species of concern in the area, particularly in lower-elevation winter range for big game.

Recreation Resources - There are many dispersed campsites in this MA. The Middle Fork Boise River corridor has two developed campgrounds, Troutdale and Neinmeyer. Most recreation use comes from the Treasure Valley.

Cultural Resources - This management area contains numerous historic sites representative of the1860s-1940s mining on the Middle Fork of the Boise River.

Rangeland Resources - The management area contains portions of four cattle and two sheep allotments.

Management Area 07-North Fork Boise River

Ownership - This management area is administered by the Idaho City Ranger District and lies in Elmore and Boise Counties. The management area is an estimated 171,400 acres, of which the Forest Service manages over 99 %, and less than 1 % is privately owned. The area is surrounded by land administered by the Boise National Forest.

FMUs – Sixty-one percent of the management area is in the FMU 3 and 39 % in the FMU 1.

RNAs and Wild and Scenic Rivers - A portion of one eligible Wild and Scenic River, the North Fork Payette River, fall within the management area. The North Fork Payette River has one segment in this area with a Recreational classification. The North Fork Boise River RNA occurs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-21. There are ambient air monitors located nearby in Garden Valley and Idaho City. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - There are no impaired water bodies currently listed under Section 303(d) of the Clean Water Act, nor are there any TMDL-assigned watersheds within this management area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. There is one strong reproducing population of bull trout in the Crooked River watershed. Bull trout also inhabit the Lower Crooked River, using it as nodal habitat. The Upper Bear Creek and Pikes Fork subwatersheds have been identified as important to the bull trout recovery, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive

Non-native Plants – Non-native plants known to occur in this MA are:
Spotted knapweed; diffuse knapweed; rush skeletonweed; musk thistle; Canada thistle; St. Johnswort
Dalmatian toadflax

An estimated 51 % of the management area is highly susceptible to invasion of noxious weeds and exotic plant species. Spotted knapweed and rush skeletonweed are the main species of concern, particularly in low-elevation winter range for big game. Dalmatian toadflax is also a concern throughout the area.

Recreation Resources - There are many dispersed campsites, particularly along the roaded corridor of the North Fork Boise River, that receive high use. Most recreation users come from the Treasure Valley.

Cultural Resources – There are many historic sites associated with mining and timer in this management area.

Rangeland Resources - Management Area 7 contains portions of two sheep allotments.

Lands and Special Uses - The Pilot Peak designated communications site lies within the management area.

Management Area 08-Mores Creek

Ownership - The management area is an estimated 196,200 acres, of which 55 % are managed by the Forest Service, 22 % are privately owned, 21 % are State of Idaho lands, and 2 % are BLM lands. Inholdings include large blocks of private and state land both south and north of Idaho City. Lands administered by the Boise NF surround the MA.

FMUs – All of the management area is in the FMU 2.

RNAs and Wild and Scenic Rivers - One eligible Wild and Scenic River, Mores Creek, falls within the management area. Mores Creek has one segment in this area with a Recreational classification. The Bannock Creek RNA is in this MA.

Air Quality - Portions of this Management Area lie within Montana/Idaho Airsheds ID-15 and 21 and within two counties (Boise and Elmore). There are ambient air monitors located nearby in Garden Valley and Idaho City. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Lower and Upper Elk Creek subwatersheds are part of a state-regulated public water system for the community of Idaho City.

Only one of the sixteen subwatersheds in this MA was listed under Section 303(d) of the Clean Water Act. There are currently no TMDL-assigned watersheds within this management area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Bull trout are now absent from most of this area. They are presently known to occur in the Granite-Illinois and Upper Mores Creek subwatersheds, and at depressed levels. The Upper Mores Creek subwatershed has been identified as important to bull trout recovery, and as a high-priority area for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Giant helleborine orchid, Region 4 Sensitive species; Kellogg's bitterroot, proposed Sensitive
Swamp onion, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA:
Dalmatian toadflax; diffuse knapweed; spotted knapweed; Canada thistle; St. Johnswort; tansy ragwort

An estimated 67 % of the area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weeds of concern are rush skeletonweed and spotted knapweed. A co-op agreement exists between the F.S. and Boise County to aggressively treat noxious weeds.
Recreation Resources - Paved road access, local residences, and proximity to Boise and Idaho City make the Mores Creek corridor a heavily used, year-round recreation area.

Cultural Resources - Mores Creek has the highest density of cultural resource sites of all the MAs on the Forest. The majority of sites are associated with historic mining. Idaho City and Placerville are historic mining towns in the area listed on the National Register of Historic Places.

Rangeland Resources - The management area contains all or portions of two sheep allotments located primarily in the northern and eastern portions of the area.

Special Features - The Idaho State-designated Ponderosa Pine Scenic Byway lies partly within this management area. This highway is also a National Forest Scenic Byway. The Boise Basin Experimental Forest (8,740 acres) is also in this MA.

Lands and Special Uses - Special use permits are issued for several utility corridors to private inholdings and for summer residences within the Ten Mile Summer Residence tract.

Management Area 09-Harris Creek

Ownership - The area lies in Boise County, 5-25 miles northeast of Boise, and is administered by the Idaho City and Emmett Ranger Districts. The management area is an estimated 27,500 acres, of which 52 % are managed by the Forest Service, 38 % are private inholdings, and 10 % are State of Idaho lands. The area is bordered by a mixture of private, BLM and State lands along the Payette River corridor.

FMUs – All of the management area is in the FMU 2.

RNAs and Wild and Scenic Rivers – There are no Wild and Scenic River segments or RNAs in this MA.

Air Quality - Portions of this Management Area lie within Montana/Idaho Airsheds ID-15 and 14 and within one county (Boise). There are ambient air monitors located nearby in Treasure Valley (Boise, Caldwell, Meridian, etcetera) and Garden Valley. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Horseshoe Bend, Porter Creek, Gardena, Dry Buck Creek, Banks, and Hill Creek subwatersheds contribute to state-regulated public water systems for the community of Horseshoe Bend.

No water bodies are currently listed as impaired under Section 303(d) of the Clean Water Act, nor are there any TMDL-assigned watersheds associated with this management area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. The Payette River is a migration corridor for several native and introduced species, however bull trout is not found in the rest of this management area.

Botanical Resources – TEPCS plants known to occur in the MA are:
Giant helleborine orchid, Region 4 Sensitive species; Kellogg's bitterroot, proposed Region 4 Sensitive; pale sedge, proposed Region 4 Sensitive; Buxbaum's sedge, Region 4 Watch; swamp onion, Region 4 Watch species

Non-native Plants – Non-native plants known to occur in this MA are:
Spotted knapweed; Scotch thistle; St. Johnswort; rush skeletonweed

An estimated 68 % of the area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weeds of concern are spotted knapweed and Scotch thistle, which currently occur mainly on private land adjacent to the management area, but have a high likelihood of spreading onto the Forest.

Recreation Resources - The Banks Beach Picnic Area and put in/take out on the Payette River is the only developed recreation site in the area.

Rangeland Resources - This area has portions of three cattle allotments.

Special Features - State Highway 55 has been designated as a state and federal scenic byway.

Lands and Special Uses - The Hawley Mountain designated communications site is located within the management area. There is a special use authorization for the Banks store and café.

Management Area 10-Upper South Fork Payette River

Ownership - The area lies in Boise County, and is part of the Lowman RD. The MA is an estimated 232,200 acres, of which the Forest Service administers 99 %. Most of the private inholdings lie along the South Fork Payette River. The area is bordered by the Boise NF to the north, west, and south, and by the Sawtooth NF to the east.

FMUs – Forty-two percent of this management area is in the FMU 2, 5 % in the FMU 3, and 53 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – A portion of one eligible Wild and Scenic River, the South Fork Payette River, lies within the management area. The South Fork Payette River has one segment in this area with a Recreational classification, and one with a Scenic classification. The Monumental Creek, Lowman, and Bear Creek RNAs occur in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the airshed in Garden Valley. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Grandjean subwatershed is part of a state-regulated public water system for the Sawtooth Lodge.

Eight of the sixteen subwatersheds in this area were under Section 303(d) of the Clean Water Act. These subwatersheds are Kirkham, Jackson-Fence, Blue Jay, Wolf, Bear-Camp, Grandjean, Lower Canyon Creek, and Warm Spring. There are currently no TMDLs in this MA.

Anadromous fish species no longer exist within area streams. The MA does, however, have important habitat for bull trout, which occur throughout except for the Rock Creek subwatershed. Strong local populations occur in the Upper Clear Creek, Grandjean, Canyon, Tenmile Creek, and Upper Canyon Creek subwatersheds. The Upper and Lower Canyon Creek subwatersheds have been identified as important to recovery, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho Douglasia, Region 4 Sensitive; giant helleborine orchid, Region 4 Sensitive; Kellogg's bitterroot, proposed Region 4 Sensitive; pale sedge, proposed Region 4 Sensitive; Swamp onion, Region 4 Watch; Buxbaum's sedge, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Dalmatian toadflax; rush skeletonweed; diffuse knapweed ; spotted knapweed; Canada thistle;
St. Johnswort; tansy ragwort

An estimated 67 % of the area is highly susceptible to invasion by noxious weeds and exotic plants. The concerns are with rush skeletonweed, Dalmatian toadflax, and spotted knapweed.

Recreation Resources - Much of the use in this area comes from the Treasure Valley, although recreationists come from around the country and world to float the South Fork Payette River.

Cultural Resources - This area contains prehistoric sites significant to our understanding of early Indian uses in the South Fork drainage.

Rangeland Resources - This area has portions of one cattle and four sheep allotments. All five allotments are vacant.

Special Features - The State-designated Ponderosa Pine Scenic Byway lies partly in this MA.

Lands and Special Uses - Special use authorizations are issued for two utility corridors to private inholdings. The Jackson Peak and Lowman designated communications sites are located within the area.

Management Area 11-Lower South Fork Payette River

Ownership - The area lies in Boise County, and is part of the Emmett Ranger District. The management area is an estimated 65,900 acres, of which the Forest Service administers 98 %, and 2 % are privately owned. Most of the private inholdings lie along the South Fork Payette River corridor. The area is bordered by Boise National Forest to the north, east, and south, and by a mix of private (Garden Valley), BLM, and State lands to the west.

FMUs – Fifty-five percent of this management area is in the FMU 2 and 45 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – A portion of one eligible Wild and Scenic River, the South Fork Payette River, falls within the management area. The river has one segment in the area with a Recreational classification, and one with a Scenic classification. There are no RNAs.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the Airshed in Garden Valley. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - The Lower South Fork Payette River subwatershed is part of a state-regulated public water system for the community of Horseshoe Bend.

Two of the five subwatersheds in this area were listed in 2000 as having impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Danskin-Poorman and Hole-In-The-Wall. There are currently no TMDL-assigned watersheds associated with this area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. The South Fork Payette River serves as an important over-wintering and migratory corridor for the threatened bull trout. Bull trout have been found in the Hole in the Wall and Danskin-Poorman subwatersheds.

Botanical Resources – TEPCS plants known to occur in the MA are:
Giant helleborine orchid, Region 4 Sensitive; Idaho douglasia, Region 4 Sensitive; swamp onion, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Dalmatian toadflax; spotted knapweed; Canada thistle; rush skeletonweed; purple loosestrife

An estimated 67 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weeds of concern are rush skeletonweed and Dalmatian toadflax, which currently occur in scattered populations.

Recreation Resources - Recreation in this management area is largely river-oriented.

Cultural Resources - This area contains prehistoric sites significant to our understanding of Indian uses of the Payette River system.

Rangeland Resources - This area has portions of two cattle and two sheep allotments.

Special Features – The Idaho-designated Wildlife Canyon Scenic Byway lies partly within this management area.

Lands and Special Uses - Special use authorizations include two utility corridors and numerous private water transmission lines.

Management Area 12-Bear Valley Creek

Ownership - The area lies in Valley County, and is part of the Lowman Ranger District. The management area is an estimated 85,100 acres. The area is bordered by the Boise National Forest to the west and south, the Salmon-Challis National Forest to the east, and the Frank Church - River of No Return Wilderness to the north.

FMUs – The entire management area is in the FMU 1.

RNAs and Wild and Scenic Rivers – Portions of two eligible Wild and Scenic Rivers fall within the management area, Bear Valley Creek and Elk Creek. Bear Valley Creek has three segments in this area with classifications of Recreational, Scenic, and Wild. Elk Creek has two segments in this area with classifications of Recreational and Wild. There are no RNAs.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the airshed in Garden Valley. The Sawtooth Wilderness is the closest Class I area.

Soil, Water, Riparian, and Aquatic Resources - All of the subwatersheds within this area have water bodies that were listed in 2000 as impaired under Section 303(d) of the Clean Water Act. These water bodies are within the Lower Elk, Wyoming, Fir Creek, Upper Bear Valley, Bearskin, Upper Elk, and Cache Creek subwatersheds. There are currently no TMDL-assigned watersheds associated with this area.

This area is designated critical habitat for chinook salmon, and is considered an aquatic stronghold for three Threatened fish species; chinook salmon, steelhead trout, and bull trout. It has spawning, rearing, and migratory habitat for all three species. Important habitat streams include Bear Valley, Elk, Fir, Cub, Cook, Cold, Bearskin, Sheep Trail, Wyoming, Sack, Cache, and Little Beaver Creeks. Bull trout and native cutthroat occur throughout this area, with strong local populations of bull trout existing in Cache, Wyoming, and Bearskin subwatersheds. The Upper Bear Valley Creek and Upper Elk Creek subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Blandow's helodium moss, proposed Region 4 Sensitive species

Non-native Plants – Non-native plants known to occur in this MA are:
Dalmatian toadflax; Canada thistle

Only about 1 % of the management area has high susceptibility to invasion by noxious weeds and exotic plant species of concern.

Recreation Resources - Most users in this area come from Boise and Treasure Valley, although visitors from around the country and world pass through this area on their way to float the Middle Fork Salmon River.

Cultural Resources - Archaeologists have documented prehistoric sites in Bear Valley significant for their information about Indian uses of the Forest.

Rangeland Resources – There is currently no cattle or sheep livestock grazing in this management area.

Lands and Special Uses – Recreation special uses include two outfitter and guide operations.

Management Area 13-Deadwood River

Ownership - The area lies in Valley and Boise Counties, and is part of the Lowman Ranger District. The management area is an estimated 157,200 acres, with 246 acres of private inholdings. The area is surrounded by lands administered by the Boise National Forest, and a small portion of the Frank Church - River of No Return Wilderness, administered by the Salmon-Challis National Forest.

FMUs – Thirty-four percent of the management area is in the FMU 3 and 66 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – One eligible Wild and Scenic River, Deadwood River, falls within the management area. Deadwood River has four segments with classifications of Recreational, Scenic (2 segments), and Wild. There are no RNAs.

Air Quality - This Management Area lies primarily within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the airshed in Garden Valley. The Sawtooth and Hells Canyon Wildernesses are the closest Class I areas.

Soil, Water, Riparian, and Aquatic Resources - Of the ten subwatersheds in this area, only the Lower Deadwood subwatershed was listed in 2000 as having an impaired water body under Section 303(d) of the Clean Water Act. There are currently no TMDL-assigned watersheds associated with this management area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. The area does, however, have important habitat for threatened bull trout. Bull trout are distributed throughout this area, with strong local populations occurring within the Scott Creek and Deer Creek subwatersheds. The Deer Creek and Upper Deadwood River, and Deadwood Reservoir subwatersheds have been identified as important to bull trout recovery, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; Kellogg's bitterroot, proposed Region 4 Sensitive; Mt. Shasta sedge, proposed Region 4 Sensitive

Non-native Plants – Non-native plants known to occur in this MA are:
spotted knapweed; rush skeletonweed

An estimated 29 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weeds of concern are rush skeletonweed and spotted knapweed, which are currently found in small, scattered populations throughout the management area.

Recreation Resources - Deadwood Reservoir provides high quality fishing and four developed campgrounds. The Deadwood River below the reservoir is popular for kayaking and whitewater canoeing during high-water periods. Most users in this area come from Boise and Treasure Valley.

Rangeland Resources - This area has portions of seven vacant sheep allotments and one active cattle allotment.

Lands and Special Uses – Recreation special use authorizations include two outfitter and guide operations and the Deadwood Resort.

Management Area 14-Lower Middle Fork Payette River

Ownership - The area lies in Valley and Boise Counties, just above the communities of Crouch and Garden Valley. It is part of the Emmett Ranger District. The management area is an estimated 109,600 acres, which includes 2,268 acres of State lands. The area is bordered by the Boise National Forest to the north and east, by primarily State land to the west, and by primarily private land (Crouch) to the south.

FMUs – Forty-five percent of the management area is in the FMU 2 and 55 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – A portion of one eligible Wild and Scenic River, the Middle Fork Payette River, falls within the management area. The Middle Fork has one segment in this area, with Recreational classification. There are no RNAs.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the airshed in Garden Valley. The Sawtooth and Hells Canyon Wildernesses are the closest Class I areas.

Soil, Water, Riparian, and Aquatic Resources - All of the major subwatersheds in this area are part of the state-regulated public water systems for the communities in and around Crouch and Garden Valley.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Bull trout can be found within the Plye, Anderson Creek, Rattlesnake, Sixmile, and Rocky Canyon subwatersheds, and in the Middle Fork Payette River, which serves as an important overwintering and migratory corridor for this Threatened fish. The Anderson Creek subwatershed has been identified as important to bull trout recovery, and as a high-priority area for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; giant helleborine orchid, Region 4 Sensitive; Kellogg's bitterroot, proposed Region 4 Sensitive

Non-native Plants – An estimated 55 percent of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weed of concern is spotted knapweed, a highly invasive species that is currently found in small, scattered populations throughout the area.

Recreation Resources - The roaded corridor of the Middle Fork Payette River has four developed campgrounds and offers dispersed recreation in the form of hunting, fishing, camping, snowmobiling, and driving for pleasure. Most users in the area come from either Crouch or Garden Valley, or from Boise and the Treasure Valley.

Cultural Resources - This management area contains prehistoric sites important to our understanding of Indian uses of the Payette River drainage.

Rangeland Resources - This area has portions of two sheep allotments.

Management Area 15-Upper Middle Fork Payette River

Ownership - The area lies in Valley County, and is part of the Emmett and Cascade Ranger Districts. The management area is an estimated 82,700 acres, with 20 acres of private inholdings. Lands administered by the Boise National Forest surround the area.

FMUs- Thirty-one percent of the management area is in the FMU 2, 40 % is in the FMU 3, and 29 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – A portion of one eligible Wild and Scenic river, the Middle Fork Payette River, falls within the management area. The Middle Fork has two segments in this area, with classifications of Recreational and Wild. The Eggers Creek RNA occurs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There is an ambient air monitor located nearby within the airshed in Garden Valley. The Sawtooth and Hells Canyon Wildernesses are the closest Class I areas.

Soil, Water, Riparian, and Aquatic Resources - The Silver Creek subwatershed is part of the state-regulated public water system for the community around Crouch.

There are no water bodies listed as impaired under Section 303(d) of the Clean Water Act. However, the entire management area is within a TMDL-assigned subbasin.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Federally listed bull trout are present in Bull, Sixteen-to-One, and the Upper Middle Fork streams. Silver Creek provides potential spawning and rearing habitat, and the Middle Fork Payette River serves as an important over-wintering and migratory corridor for this Threatened species. The Bull Creek and Upper Middle Fork Payette River subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho Douglasia, Region 4 Sensitive

Non-native Plants - An estimated 31 % of the management area has high susceptibility to invasion by noxious weeds and exotic plants. The main weeds of concern are spotted knapweed, rush skeletonweed, and Canada thistle.

Recreation Resources - The road corridors of the Middle Fork Payette River and Silver Creek have three developed campgrounds and offer dispersed recreation. Motorcycle use on area trails is fairly heavy. Most users in this area come from either Crouch or Garden Valley, or from Boise and the Treasure Valley.

Rangeland Resources - This area has a portion of one active sheep allotment.

Management Area 16-Sagehen Reservoir

Ownership - The area lies in Valley, Gem, and Washington Counties, and is part of the Emmett Ranger District. The management area is an estimated 90,300 acres, of which 95 % are managed by the Forest Service, 3 % are private lands, and 2 % are State of Idaho lands. The area is bordered by the Payette National Forest to the north, the Boise National Forest to the northeast, and by a mix of private, State, and federal lands elsewhere.

FMUs – Forty-six percent of the management area is in the FMU 2 and 54 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – There are no Wild and Scenic River segments or RNAs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-14. There is an ambient air monitor located nearby within the Airshed in Garden Valley. The closest Class I areas are the Sawtooth, Hells Canyon, and Eagle Cap Wildernesses.

Soil, Water, Riparian, and Aquatic Resources - No water bodies within the management area were listed in 2000 as impaired under Section 303(d) of the Clean Water Act. There are no TMDL-assigned subwatersheds associated with this area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Focal and adjunct habitats for threatened bull trout are found in this area. Bull trout occur within streams of the Squaw-Pole, Dodson, and Third Fork subwatersheds, with strong populations occurring in the latter subwatershed. The Third Fork and Squaw-Pole subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for active restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Tolmie's onion, Region 4 Sensitive; swamp onion, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Dalmatian toadflax; rush skeletonweed; diffuse knapweed

An estimated 51 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weed of concern is Dalmatian toadflax, which occurs in scattered populations throughout the area.

Recreation Resources - Sage Hen Reservoir provides water-oriented recreation along with four developed campgrounds, two boat ramps, and a picnic area. About half the use in this management area is local, originating from Emmett, and much of the rest comes from the Treasure Valley.

Cultural Resources - This area contains one of the highest densities of prehistoric sites on the Forest.

Rangeland Resources - This area has portions of nine cattle allotments and features a large number of range structural improvements.

Lands and Special Uses - Special use authorizations include a designated utility corridor containing the Emmett-Stibnite power transmission line.

Management Area 17-North Fork Payette River

Ownership - The area lies in Valley and Boise Counties, and is part of the Emmett and Cascade Ranger Districts. The management area is an estimated 78,500 acres, of which the Forest Service manages 83 %, 2 % are private lands, and 15 % are State of Idaho lands.

FMUs – Seventy-eight percent of the management area is in the FMU 2 and 22 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – One eligible Wild and Scenic River, the North Fork Payette River, falls within the management area. The Payette River has one segment in this area with a classification of Recreational. The Dry Buck RNAs occurs in this MA.

Air Quality - Portions of this Management Area lie within Montana/Idaho Airshed ID-14. There is an ambient air monitor located nearby within the airshed in Garden Valley. The closest Class I areas are the Sawtooth, Hells Canyon, and Eagle Cap Wildernesses.

Soil, Water, Riparian, and Aquatic Resources - The Howell-Phillips and Big Eddy subwatersheds are part of state-regulated public water systems for the community of Horseshoe Bend.

Three of the thirteen subwatersheds in this area were listed in 2000 as having impaired water bodies under Section 303(d) of the Clean Water Act. These subwatersheds are Tripod-Murray, Upper Clear Creek, and Lower Clear Creek. There are currently no TMDL-assigned subwatersheds associated with this area.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. Threatened bull trout have not been recently documented in this area.

Botanical Resources – TEPCS plants known to occur in the MA are:
Giant helleborine orchid, Region 4 Sensitive; Idaho douglasia, Region 4 Sensitive

Non-native Plants – An estimated 39 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. Spotted knapweed, rush skeletonweed, and Canada thistle are currently the main weeds of concern in this management area.

Recreation Resources - The North Fork Payette River provides river-oriented recreation, including five developed campgrounds and some of the more challenging whitewater rapids in the west. Much of the use comes from the Treasure Valley or beyond.

Cultural Resources - Historic properties in this management area are associated with Indian fishing and gathering, and historic grazing and logging on the North Fork Payette River and Long Valley.

Rangeland Resources - This area has portions of two cattle allotments and one active sheep allotment.

Special Features – State Highway 55 has been designated as a state and federal scenic byway.

Lands and Special Uses - Special uses include designated electronic communication sites on Snowbank Mountain, utility corridors along Forest Road 422, and a designated utility corridor containing the Emmett-Stibnite power transmission line.

Management Area 18-Cascade Reservoir

Ownership - The area lies primarily in Valley County, and is part of the Cascade Ranger District. The management area is an estimated 54,400 acres, which includes several small parcels of private inholdings (2 %), and a large block of State lands in the West/Deep Creeks area (4 %). The western portion of the area is bordered by the Payette National Forest to the west and north, the Boise National Forest to the south, and Cascade Reservoir (now known as "Lake Cascade") and a mix of private and State lands to the east. The eastern portion of the area is bordered by Boise National Forest to the east, Payette National Forest to the north, and mostly private lands to the west and south.

FMUs – Forty-six percent of the management area is in the FMU 2 and 54 % is in the FMU 3.

RNAs and Wild and Scenic Rivers – There are no Wild and Scenic Rivers in this MA. The Needles RNA occurs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There are ambient air monitors located within the airshed in McCall and Garden Valley. The closest Class I areas are the Sawtooth, Hells Canyon, and Eagle Cap Wildernesses.

Soil, Water, Riparian, and Aquatic Resources - Only one of five subwatersheds in this area was listed in 2000 as impaired under Section 303(d) of the Clean Water Act—the Cascade Reservoir subwatershed. This management area has a TMDL assigned to all of its subwatersheds.

Anadromous fish species no longer exist within area streams due to downstream dams that block their migration routes to and from the ocean. This area does support limited populations of bull trout, with the North Fork Gold Fork subwatershed containing an isolated local population of marginal quality. The North Fork Gold Fork subwatershed has been identified as important to bull trout recovery, and as a high-priority area for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; Kellogg's bitterroot, proposed Sensitive; tall swamp onion, Region 4 Watch bank monkeyflower, Region 4 Watch species

Non-native Plants –An estimated 24 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species of concern. The main weeds of concern are spotted knapweed, Canada thistle, yellow toadflax, rush skeletonweed, and leafy spurge.

Recreation Resources - Cascade Reservoir provides water-oriented recreation, including developed campgrounds, fishing, boating, and water-skiing. Much of the use comes from Valley County and the Treasure Valley area.

Cultural Resources - The Cascade Reservoir area was an important fishery for Shoshone and Nez Perce Indians. Long Valley was settled in the 1880s and contains some of the oldest agricultural sites on the Forest.

Rangeland Resources - This area has portions of five cattle allotments, one active sheep allotment, and a stock driveway.

Lands and Special Uses - The Midway Point, No Business East, and No Business West designated communications sites are all within the management area. Two proposed utility corridors are located within the management area. One is a power transmission line between the towns of Council and Cascade crossing the West Mountains in the vicinity of Stewarts Meadow southwest of Cascade. The other is a power transmission line in the Poison Creek vicinity anticipated as needed for the proposed Tamarack ski area developments.

Management Area 19-Warm Lake

Ownership - The area lies in Valley County, and is part of the Cascade Ranger District. The management area is an estimated 103,600 acres, almost all of which are administered by the Forest Service. The area is bordered by Boise National Forest to the east, south, and west, and by Payette National Forest to the north.

FMUs – Fifteen percent of this MA is in the FMU 2, 65 % in the FMU 3, and 20 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – A portion of one suitable Wild and Scenic River, the South Fork Salmon River, falls within the management area. The South Fork Salmon River has one segment in this management area with a classification or Recreational. The Back Creek RNA occurs in this MA.

Air Quality - This MA lies within Montana/Idaho Airshed ID-15. There are ambient air monitors located within the airshed in McCall and Garden Valley. The Sawtooth and Hells Canyon Wildernesses are the closest Class I areas.

Soil, Water, Riparian, and Aquatic Resources - All of the subwatersheds within this area except Warm Lake Creek were listed under Section 303(d) of the Clean Water Act. In addition, the MA is within a TMDL-assigned subbasin.

The management area has designated critical habitat for chinook salmon. Bull trout also occur. Important spawning, rearing, and migratory habitats for chinook salmon, steelhead, and bull trout occur in the South Fork Salmon River and many of its tributaries. Chinook spawn and rear in the Warm Lake Creek, Dollar Creek, Tyndall-Stolle, Upper SF Salmon River, and Curtis Creek subwatersheds. The Curtis Creek and Sixbit Creek subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Idaho douglasia, Region 4 Sensitive; giant helleborine orchid, Region 4 Sensitive; Kellogg's bitteroot, proposed Region 4 Sensitive; Podgrass, proposed Region 4 Sensitive; white beakbrush, proposed Region 4 Sensitive; bulb-bearing water hemlock. Proposed Region 4 Sensitive; Buxbaum's sedge, Region 4 Watch

Non-native Plants – Non-native plants known to occur in this MA are:
Spotted knapweed; rush skeletonweed

An estimated 21 % of the management area is highly susceptible to invasion by noxious weeds and exotic plant species. The main weed of concern is spotted knapweed, which is currently found in scattered populations throughout the area. Warm Lake is susceptible to invasion from Eurasian water milfoil.

Recreation Resources - The Warm Lake is a popular year-round destination for water-oriented recreation. Forest Service developed sites include three campgrounds, a boat ramp, a picnic area, and a swimming area. Privately owned or operated sites include lodges, summer homes, and organization camps. Users in this area come from Cascade and Long Valley to the west, and Boise and Treasure Valley to the south.

Cultural Resources - Documented Nez Perce camps existed along the South Fork of the Salmon River and at Warm Lake. These camps were used well into the historic period and the area remains important to the Nez Perce people. Knox Ranch is one of the oldest agricultural sites on the Forest. Historical burials and the Billy Cline Cabin are associated with Knox Ranch.

Rangeland Resources - Grazing is limited to recreational and administrative stock.

Lands and Special Uses - Special use authorizations include utility corridors to private inholdings, water systems, and a designated utility corridor containing the Emmett-Stibnite power transmission line. The Cabin Creek designated communications site is located within the management area.

Management Area 20-Upper Johnson Creek

Ownership - The area lies in Valley County, and is part of the Cascade Ranger District. The management area is an estimated 90,900 acres, all of which are administered by the Forest Service. The area is surrounded by Boise National Forest, including the Frank Church - River of No Return Wilderness Area to the east.

FMUs – Forty-six percent of the management area is in the FMU 3 and 54 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – One eligible Wild and Scenic River, Johnson Creek, falls within the management area. Johnson Creek has one segment in this area with a classification of Recreational. There are no RNAs in this MA.

Air Quality – This Management Area lies within Montana/Idaho Airshed ID-15. There are ambient air monitors located within the airshed in McCall and Garden Valley. The Sawtooth and Hells Canyon Wildernesses are the closest Class I areas.

Soil, Water, Riparian, and Aquatic Resources - Water bodies in the Park-Sheep, Lunch-Rock, Halfway, and Upper Johnson Creek subwatersheds were listed in 2000 as impaired under Section 303(d) of the Clean Water Act. There are no TMDL-assigned watersheds associated with this management area.

This area has spawning, rearing, and migratory habitat for chinook salmon and steelhead trout, and has designated critical habitat for chinook salmon. The Upper Sulphur Creek, Upper Johnson Creek, and Lower Burntlog subwatersheds provide spawning and rearing opportunities for chinook salmon. Steelhead also spawn and rear in the Lower Burntlog, Lunch-Rock, Upper Johnson Creek, and Sand Creek subwatersheds. Bull trout and native cutthroat trout are found throughout this area. The Lower Burntlog Creek and Upper Burntlog Creek subwatersheds have been identified as important to the recovery of listed fish species, and as high-priority areas for restoration.

Botanical Resources – TEPCS plants known to occur in the MA are:
Mt. Shasta sedge, proposed Region 4 Sensitive; Buxbaum's sedge, Region 4 Watch

Non-native Plants: Only about 3 % of the management area has high susceptibility to invasion by noxious weeds and exotic plant species.

Recreation Resources – Most of the recreation use is dispersed. Much of the use in this area is local, originating from the Cascade and Warm Lake areas.

Cultural Resources - Forest archaeologists have documented prehistoric sites on Johnson Creek associated with early indigenous and Shoshonean occupations.

Rangeland Resources - This area has portions one cattle allotment.

Lands and Special Uses - Special use authorizations include a telephone utility corridor and a designated utility corridor containing the Emmett-Stibnite power transmission line.

Management Area 21-Lower Johnson Creek

Ownership - The area lies in Valley County, and is part of the Cascade Ranger District. The management area is an estimated 63,900 acres, which includes several small, private inholdings, such as Wapiti Meadows, Cox Ranch, Bryant Ranch, and the community of Yellow Pine. The area is bordered by the Payette National Forest to the west, north, and northeast, by the Boise National Forest to the south, and by the Frank Church-River of No Return Wilderness Area to the southeast.

FMUs – Forty-eight percent of the management area is in the FMU 2 and 52 % is in the FMU 1.

RNAs and Wild and Scenic Rivers – One eligible Wild and Scenic River, Johnson Creek, falls within the management area. Johnson Creek has one segment in this area with a classification of Recreational. The Chilcoot Peak RNA occurs in this MA.

Air Quality - This Management Area lies within Montana/Idaho Airshed ID-15. There are ambient air monitors located within the Airshed in McCall and Garden. The closest Class I areas are the Sawtooth, Hells Canyon, and Selway-Bitterroot Wildernesses.

Soil, Water, Riparian, and Aquatic Resources - No Mans-Boulder is part of a state-regulated public water system for the community of Yellow Pine.

Water bodies within the Caton Creek, Loosum-Reegan, No Mans-Boulder, and Wardenhoff-Bear subwatersheds were listed in 2000 as impaired under Section 303(d) of the Clean Water Act. There are no TMDL-assigned subwatersheds associated with this management area.

This area has spawning, rearing, and migratory habitat for chinook salmon, steelhead trout, and bull trout, and is designated critical habitat for these Threatened species. Johnson Creek also has resident and fluvial populations of bull trout. Chinook, steelhead, and bull trout occur throughout this area, with a strong local population of bull trout in the Riordan subwatershed. The Wardenhoff-Bear subwatershed has been identified as important to the recovery of listed fish species and as a high-priority area for restoration.

Botanical Resources – There are no TEPCS plants known to occur in the management area.

Non-native Plants: Only about 10 % of the management area has high susceptibility to invasion by noxious weeds and exotic plant species. The main weed of concern is Canada thistle, which only occurs in a few small populations.

Recreation Resources – Most of the recreation use is dispersed. Much of the use in this area is local, originating from the Yellow Pine and Warm Lake areas.

Cultural Resources - Lower Johnson Creek contains sites representative of the Western Idaho Archaic Complex. Nez Perce camps existed along Johnson Creek and at Riordan Lake. These camps were used well into the historic period, and the area remains important to the Nez Perce people.

Rangeland Resources - This area has portions of one cattle allotment and one horse allotment.

Lands and Special Uses - Special use authorizations include telephone and electric utility corridors, the Johnson Creek airstrip, water transmission lines, Valley County transfer stations, an Idaho Department of Fish and Game dwelling, fisheries projects, a cemetery, and a designated utility corridor containing the Emmett-Stibnite power transmission line.

Management Area 22-Frank Church-River of No Return Wilderness

Ownership - Management Area 22 is comprised of lands administered by the Salmon-Challis National Forest within the Frank Church--River of No Return (FC-RONR) Wilderness Area. The area lies in Valley County, and is on the Cascade and Lowman Ranger Districts. The management area is an estimated 64,500 acres, and includes a few small, private inholdings along Sulphur and Dagger Creeks. The area is bordered by more Wilderness and the Salmon-Challis National Forest to the north and east, and Boise National Forest to the west and south.

FMUs – This management area lies entirely within the Frank Church – River of No Return Wilderness Management Plan.